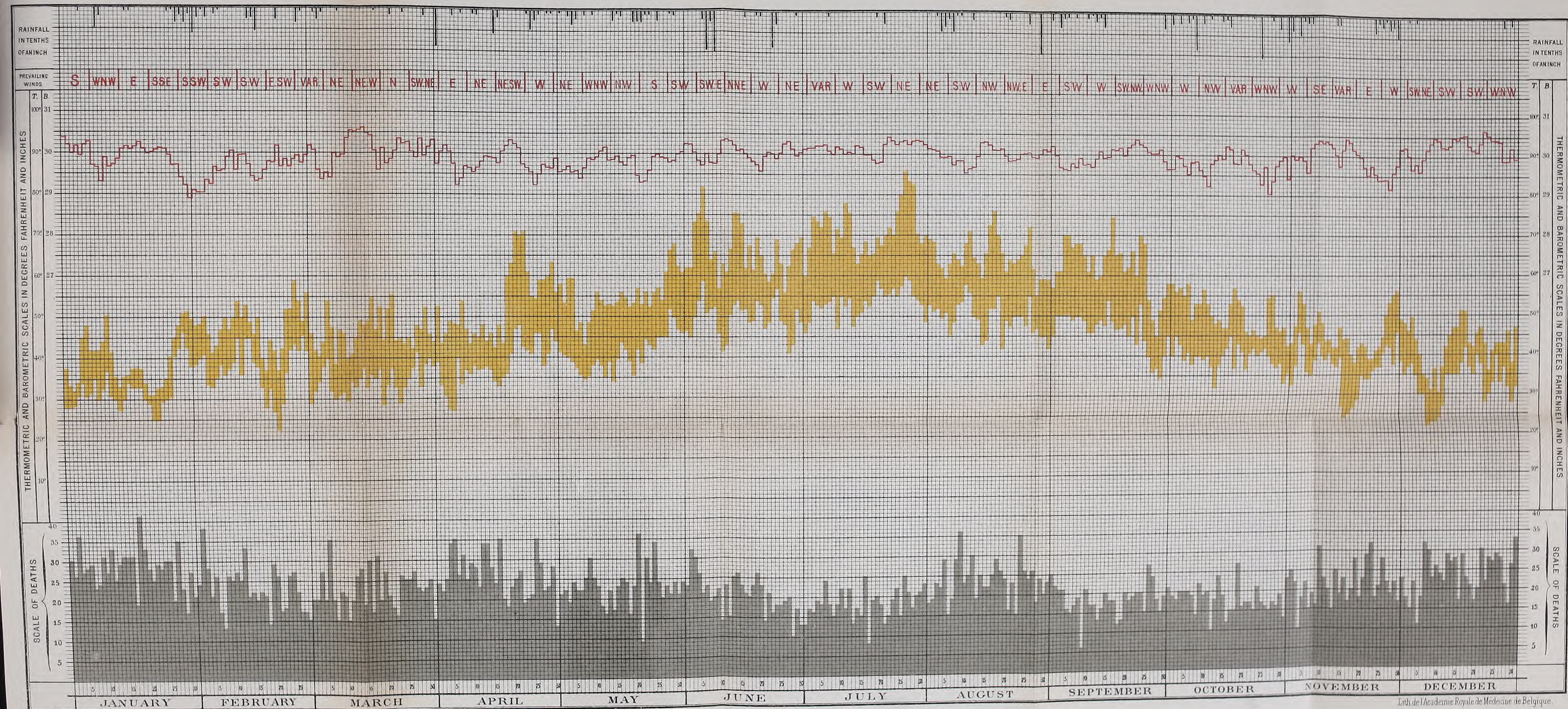


Borough of Birmingham.


Chart illustrating the relations of the number of deaths to the principal meteorological conditions on each day of the year 1885.



Printed by F. Geron, 12, Marché du Parc, Bruxelles.

Lith. de l'Académie Royale de Médecine de Belgique.

MORTALITY: — Deaths METEOROLOGY: — Temperature (maximum and minimum) — BAROMETRIC PRESSURE — RAINFALL.
(corrected and reduced to 32° Fahrenheit and sea level)



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REPORT

ON THE

HEALTH OF THE BOROUGH

OF

BIRMINGHAM,

FOR THE YEAR 1885,

ALSO,

ON THE PROCEEDINGS TAKEN UNDER THE ACT FOR THE

PREVENTION OF ADULTERATION

OF ARTICLES OF FOOD AND DRINK,

BY

ALFRED HILL, M.D., F.I.C.,

Medical Officer of Health,

and

Analyst to the Borough.

PRINTED BY ORDER OF THE HEALTH COMMITTEE.

BIRMINGHAM:

GEO. JONES & SON, TOWN HALL PRINTING OFFICES, 87-89 EDMUND STREET.

HEALTH DEPARTMENT,

THE COUNCIL HOUSE,

Birmingham, April 9th, 1886.

TO THE HEALTH COMMITTEE.

MR. CHAIRMAN AND GENTLEMEN,

I have the honour to submit my thirteenth Annual Report on the Health of the Borough, and the gratification of being able to announce the fact that the year 1885, to which it relates, has been distinguished by a higher sanitary condition than any preceding year of which I have cognizance. This conclusion is based not on total rate of mortality alone, but on a number of other facts, such as diminished mortality in infants under one year of age, and in children under five years of age, diminished mortality from zymotic or preventable disease, and a higher death-age than has been observed in previous years.

Introductory
Remarks.

It is especially worthy of notice, that in spite of continued increase of population, with the necessarily attendant evil of increased density, the absolute number of deaths is less, with two exceptions, than in any year since 1870, and less than in 1867 and 1868. For instance, in 1871, with a population of 344,980, and an aggregation of only 41 persons per acre, the number of deaths was 8,594, while in 1885, with an estimated population of 427,769, and 51 persons to the acre, the number of deaths was only 8,156. These facts are an indisputable proof of the greatly improved health of the Borough, as well as of the immense value of sanitary work, and cannot fail to be a source of just pride and satisfaction to your Committee, and the Sanitary Department of the Town Council generally, as being the fairly-earned results of persevering and well-directed sanitary effort.

I. VITAL STATISTICS.

The Population of the Borough at the middle of the year 1885, calculated by the Registrar-General on the supposition that the same rate of increase has prevailed since the taking of the last Census in 1881, as was found to have obtained in the intercensal period from 1871 to 1881, is 427,769.

Population.

Population
(Continued)

As, however, the amount of any possible error in the estimate of a population naturally increases with the distance of time that has elapsed since the last Census, the estimate for our Borough must be looked upon each year with less and less confidence till the next enumeration of the people. It has been found already, although only half of the decennial period has expired, that the populations of six towns—Salford, Leicester, Bradford, Nottingham, Newcastle, and Cardiff—are, doubtless, by this method of calculation either under- or over-estimated to a serious extent. When the figures of the Census of 1871 relating to Birmingham came to be published, it was found that the population of the Borough had been over-stated by upwards of thirty-three thousand, or very nearly ten per cent. of the whole population. Though I do not anticipate the occurrence of so serious an error by the time of the next Census in 1891, still there certainly appear to be reasons for thinking that during the last five years the population of our Borough has not been growing at so fast a rate as it did during the ten years preceding 1881. In many portions of the Borough, even on the outskirts, the amount of available building land has become practically *nil*, so that any further extension of the population in these directions does not take place within, but without the Borough, while the greatly increased facilities for comparatively inexpensive and rapid locomotion, such as cheap trams, are calculated to lengthen, and, doubtless, to some degree are already lengthening the distance between the place of business and the home. Further, it must not be overlooked that the considerable movements of the population, resulting from the extensive demolitions of property which have for several years been effected in the more central portions of the town, would be in some cases to localities beyond the Borough boundaries. Again, owing to an unusually low birth-rate, the natural increase of population has not kept pace during the last few years with the estimated increase, for the former was last year 6,227, while the latter was 6,511, so that if the estimated increase really occurred, it follows, which is very unlikely, that nearly three hundred more persons came to reside during the year in the Borough than the number of those who removed outside its confines. The frequent existence of much doubt as to the correctness of populations estimated on factors which ruled in some instances on an average of fifteen years ago, and which may have long ceased to apply, or may even have been replaced by those of an entirely opposite kind, and the serious differences often found between the computed and the actual number of people in many of our large towns demonstrate how great would be some of the advantages to be derived from a quinquennial in place of a decennial Census.

Natural
Increase.

The natural increase of the population was last year equal to a rate of 1.46 per cent. of the whole population, and compares

favourably with that of the previous year, which was only 1·41. Natural Increase (Continued).
The larger amount of this year's natural increase is the result of the gratifying circumstance that the number of persons who died during 1885 was nearly 900 fewer than in 1884.

As the area of the Borough continues unaltered, whilst the Area.
population is considered, and doubtless rightly, to be ever increasing, it follows as a matter of course that the mean density of the population continues to become greater. Last Density.
year's estimate of the population furnishes 50·9 as the mean number of persons per acre. This statement, however, gives very little idea of the density of our population on any given area, for it goes without saying that the density of population in some parts of our Borough bears no possible comparison with that of other portions.

Taking the Borough as a whole, the average number of persons per acre has increased from an estimate of 42·4, when I took office in 1873, to the present figure 50·9, so that it is computed that in twelve years the mean density of the population of the Borough has been augmented by twenty per cent. It is a generally recognised fact that the proportion of sickness and mortality in any locality corresponds, other things being equal, with the density of its inhabitants; in Birmingham, however, the converse of this has for many years held good, clearly showing that beneficial agencies have been at work which have more than neutralised the untoward influence of a constantly progressing density. The nature of some, at least, of these beneficial agencies will be referred to later on. Connection between mortality and density.

The following statement contains estimates of the population at the middle of the year, the number of persons to the acre, and the total Death-rate in some of the principal towns of the kingdom for the year in question :— Comparative Statement of Death-rate, &c., in certain large towns.

Population, Density, and Death-rate of certain Towns.	Estimated Population, 1885.	No. of Persons per Acre.	Death-rate.
London	4,083,928	54·2	19·6
Liverpool	579,724	111·3	23·7
Birmingham ...	427,769	50·9	19·1
Manchester	337,342	78·6	26·4
Sheffield	305,716	15·6	20·6
Leeds	333,139	15·4	19·9
Salford	204,075	39·5	21·0
Newcastle-on-Tyne	153,209	28·5	26·0
Norwich	91,215	12·2	20·2
Bristol	218,169	47·1	19·6
Glasgow	519,965	86·2	25·7
Dublin	353,082	14·3	28·4

A comparison of the Densities and Death-rates of the above-mentioned twelve of the largest towns and cities in the United Kingdom, which I have long been in the habit of giving in my Annual Reports, will bring to light the highly gratifying fact that, whilst the density of Birmingham is exceeded by only four of these large urban communities, viz., London, Liverpool, Manchester, and Glasgow, and is considerably greater than some of the seven other towns in the list, yet its Death-rate is the lowest of all.

Elevation.

Geological
Position.

It is only right, however, not to ignore the many natural advantages which our town possesses, and which necessarily exert a beneficial effect on the general health and mortality of its inhabitants. The Borough is favoured both as to site and elevation. With regard to the former, it may be said that by far the greater portion of the town is built upon a sandy or gravelly sub-soil, while its undulating surfaces are a matter of notoriety. Both these features distinctly favour, of course, greater dryness of surface than could under other circumstances be attained. Its height above the sea level is also considerable, ranging from about 600 feet at the top of the Hagley Road to just over half this height at the far end of Nechells. Roughly speaking, there is a general fall from the western to the eastern side of the town.

MARRIAGES.

Marriages.

Returns of Marriages have been kindly furnished me by Mr. W. Cooper, Superintendent Registrar of the Parish of Birmingham, and by Mr. Hastings and Mr. E. Docker, who hold similar offices for the Parishes of Aston and King's Norton respectively. I glean from them that the number of Marriages in the Borough during the year was 3,276, against 3,435 in 1884, and 3,634 in 1883.

Marriage-rate.

It is thus seen that the number of Marriages in the Borough has experienced a considerable decline during the past two years, and this is well indicated by the Marriage-rate, which has fallen from 17·5 per thousand in 1882 and 1883 to only 15·3 in the year under notice.

Some ten years ago, when trade was prosperous and wages were higher and more regular than now, the Marriage-rate stood at 20·1. It is no doubt reasonable to assume that so considerable a falling off in the number of Marriages may be looked upon as one of the many indications of the comparative absence of commercial prosperity which now prevails.

The number of Marriages and the Marriage-rate of the Borough in each of the last ten years have been as follows:—

	Year 1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
No. of Marriages	3,736	3,683	3,245	3,046	3,215	3,261	3,581	3,634	3,435	3,276
Rate per 1,000 of the Population	20·1	19·5	16·7	15·7	16·3	16·2	17·5	17·5	16·3	15·3

The number of

BIRTHS

recorded by the several District Registrars of the Borough ^{Births.} during the year is 14,383, a lower number than in any year as far as my records extend, viz., to 1873. When we call to mind that, during the twelve years that have elapsed since that date, the population of the Borough has increased according to the estimate of the Registrar General by upwards of seventy-two thousand, the striking character of this statement will be more fully realised. In 1877 our number of registered Births exceeded 16,000, since which year the numbers have fallen uninterruptedly year by year till in 1883 the number of Births recorded by the local Registrars is only 14,701. The number for 1884 shows a trifling increase upon the previous year's figure, and now, as stated above, the number stands lower than ever. Of the Births registered during the year 7,299 were those of males, and 7,084 those of females.

The numbers of Births of each sex registered in each ^{Births in each} quarter of every year since 1873, inclusive, and the equivalent ^{quarter since} Birth-rates of each year during that period are set forth in the following statement :—

	1st	2nd	3rd	4th	Total.	Birth-rate.
1873.	Quarter.	Quarter.	Quarter.	Quarter.		
Total	3,741	3,564	3,378	3,814	14,497	40·78
Males	1,892	1,783	1,715	1,950	7,340	
Females	1,849	1,781	1,663	1,864	7,157	
1874.						
Total	3,814	3,871	3,493	3,710	14,888	41·25
Males	1,953	1,961	1,753	1,853	7,520	
Females	1,861	1,910	1,740	1,857	7,368	
1875.						
Total	3,787	3,737	3,581	3,757	14,862	40·57
Males	1,929	1,884	1,815	1,904	7,532	
Females	1,857	1,853	1,766	1,853	7,329	
Sexless	1	—	—	—	1	
1876.						
Total	4,140	3,924	3,803	3,949	15,816	42·53
Males	2,045	1,996	1,959	2,028	8,028	
Females	2,095	1,928	1,844	1,921	7,788	
1877.						
Total	4,296	4,009	3,769	3,927	16,001	42·39
Males	2,139	2,015	1,878	2,037	8,069	
Females	2,157	1,994	1,891	1,890	7,932	
1878.						
Total	4,139	4,096	3,849	3,880	15,964	41·67
Males	2,160	2,051	1,962	1,982	8,155	
Females	1,979	2,045	1,887	1,898	7,809	
1879.						
Total	4,124	3,912	3,723	4,087	15,846	39·98
Males	2,086	1,992	1,878	2,096	8,052	
Females	2,038	1,920	1,845	1,991	7,794	

Births in each quarter since 1873. (Continued).		1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.	Birth-rate.
	1880.						
	Total ...	3,964	4,104	3,572	3,471	15,111	38·28
	Males ...	2,023	2,100	1,762	1,802	7,687	
	Females ...	1,941	2,004	1,810	1,669	7,424	
	1881.						
	Total ...	3,965	3,754	3,530	3,590	14,869	36·96
	Males ...	1,991	1,893	1,804	1,822	7,510	
	Females ...	1,974	1,861	1,756	1,768	7,359	
	1882.						
	Total ...	3,968	3,760	3,478	3,660	14,866	36·39
	Males ...	2,010	1,922	1,784	1,903	7,619	
	Females ...	1,958	1,838	1,694	1,757	7,247	
	1883.						
	Total ...	3,975	3,814	3,460	3,452	14,701	35·44
	Males ...	1,969	1,934	1,708	1,740	7,351	
	Females ...	2,006	1,880	1,752	1,712	7,350	
	1884.						
	Total ...	3,765	3,817	3,557	3,852	14,991	34·91
	Males ...	1,910	1,928	1,889	1,962	7,689	
	Females ...	1,855	1,889	1,668	1,890	7,302	
	1885.						
	Total ...	3,776	3,528	3,550	3,529	14,383	33·62
	Males ...	1,928	1,768	1,775	1,828	7,299	
	Females ...	1,848	1,760	1,775	1,701	7,084	

Birth-rate.

The fall in the Birth-rate, it will be seen, is still more conspicuous than in the actual number of Births, showing a decline from the maximum obtained in 1876 of nearly 21 per cent.

Information of the birth of a child is required to be furnished by one of the parents; neglect to give it is punishable by a penalty of forty shillings and costs.

Towns
compared.

Though there is little doubt that some few instances of neglect to register births occur, there is no possible reason for supposing that such omissions are more frequent now than formerly. For an explanation of the continued reduction in the Birth-rate we must therefore look elsewhere. On glancing at the annexed statement, which gives the Birth-rate of the principal large towns, it is noticeable that low as our Birth-rate undoubtedly is, it is still higher than the average rate of the twenty-eight largest English towns, and among others, of the Metropolis. It is clear, therefore, that some common influence is at work throughout the country, and it is scarcely open to question that the chief factor in bringing about so abnormally low a Birth-rate is the continued low Marriage-rate which has resulted from the prolonged depression of trade. The Birth-rates of the principal large English towns during the year are as under :—

28 large Towns.	London	L'pool	Birm.	Manch.	Leeds	Sheff'd	Salf'd	N'castle	N'wich	Bristol
33·4	32·4	33·6	33·6	36·2	34·3	34·9	34·2	38·2	33·5	31·1

VACCINATION.

The return for the Parish of Birmingham shows that of 8,654 children, whose births were recorded on the sheets furnished to the Vaccination Officers of this Parish by the Local Registrars, 7,277, or 84·1 per cent. were vaccinated with success, and 967, or 11·2 per cent., died before Vaccination could be performed; the Vaccination of 108 others was postponed through ill health, on production of a medical certificate, while 219, or 2·5 per cent., were taken out of the district, and all of these, except 39, without the cognisance of the Vaccination Officer and to places beyond his reach. Twenty-two children proved insusceptible to Vaccination, and sixty-one remain unaccounted for.

In Birmingham
Parish.

In that part of the Parish of Aston within the Borough, the records of 5,443 births were furnished to the Vaccination Officer of that District during the year embraced by these returns; the Vaccination of 4,492, or 82·5 per cent. of these children was successfully carried out, while that of 603, or 11·1 per cent., could not be performed on account of the death of the children before Vaccination need be effected. The Vaccination of 82, or 1·5 per cent. of the children was deferred on its being shown that they were unfitted by ill-health from undergoing the operation, and 9 were found to be proof against the effects of Vaccination. In 179 instances, or 3·3 per cent., the parents purposely, or otherwise, removed their children from the address furnished to the Vaccination Officer, either to districts inaccessible to him, or to other places within his district, without his knowledge; while 19 other children were removed to districts under other Vaccination Authorities, whose officers have been informed of their whereabouts and of the circumstances of the case. The non-vaccination of 59 infants returned by the Registrars during this period cannot be satisfactorily explained.

In Aston
Parish.

The statistics having reference to that portion of the King's Norton Parish within the jurisdiction of your Authority indicate that the Vaccination Officer was apprised by the Registrar for this District of the births of 419 infants; 373, or 89·0 per cent., have been successfully Vaccinated, 35 died unvaccinated, the Vaccination of 2 was postponed, while in 5 instances Vaccination proved of no effect. The remaining infants, 4 in number, were either taken from the District, or their Vaccination could not be accounted for.

In Edgbaston.

The percentages of children successfully Vaccinated, and of those not Vaccinated for certain reasons, in each of the

several portions of the Borough controlled by separate Vaccination Authorities, may be found in the following statement :

Table of
comparison of
Vaccination.

PARISH.	Year.	Vaccinated.	Died before Vaccination.	Removed from District and not found.	Unfit, insusceptible, or otherwise.
Birmingham	1880	86.2	9.7	3.0	1.1
	1881	87.3	9.6	1.7	1.4
	1882	88.9	9.2	1.0	0.9
	1883	87.1	10.2	1.3	1.4
	1884	87.2	9.7	1.4	1.7
	1885	84.1	11.2	2.5	2.2
Aston (Borough portion)	1880	81.3	9.3	6.4	3.0
	1881	83.2	10.3	5.5	1.0
	1882	81.8	9.3	6.4	2.5
	1883	82.4	9.5	5.2	2.9
	1884	82.4	11.4	3.7	2.5
	1885	82.5	11.1	3.6	2.8
Edgbaston	1880	82.6	8.2	1.8	7.4
	1881	81.3	8.2	3.2	7.3
	1882	86.1	7.3	3.6	3.0
	1883	91.1	6.7	0.9	1.3
	1884	89.2	7.5	1.1	2.2
	1885	89.0	8.3	1.0	1.7

A review of the figures in the above table reveals the fact that the proportion of children in the Parish of Birmingham successfully vaccinated during the year covered by the returns is lower than in any other year in the table; this result is largely brought about by the circumstance that the percentage of children who died while very young during this period is larger than usual. The percentages of children Vaccinated with success in the two other Parishes are nearly identical with those of the previous year; the proportion in the Parish of Aston still remains, however, lower than in either Birmingham or Edgbaston.

I am indebted for these returns to Mr. Bowen, Clerk to the Birmingham Guardians, and to Messrs. Stephens and Johnson, Vaccination Officers for the Parishes of Aston and King's Norton respectively; as it is not compulsory upon parents to have their children Vaccinated till three months after birth, the returns on which I have been commenting do not refer to the births registered in 1885, but to those recorded during the twelve months which ended on the 30th of June of that year.

Vaccination
(Continued).

DEATHS.

The Deaths registered during the year amount to 8,156, and comprise those of 4,314 males and 3,842 females. This number, in spite of a continual increase of the population of the Borough, is a lower one than any recorded since 1881, and much lower than the average number of the ten preceding years, viz., 8,756, though since the first year of that period it is estimated that the population has increased by no less than 61,444. In my first year of office, with a population computed to be less than that at the middle of last year by so much as 72,229, the Deaths then recorded exceeded those registered in the past year by 834. This statement alone is sufficient to bring into prominence the remarkable reduction in the mortality of the Borough during the past thirteen years, during which period the Death-rate of the Borough has fallen from 24·8 to 19·1. The Death-rate of the year under notice is the lowest in my records, being only 19·07, as compared with 21·06 in the previous year, 21·01 in 1883, and 23·4 (or 4·3 per 1,000 higher), the average rate of the preceding twenty years, the period over which records of the Borough Death-rate extend.

Deaths.

Death-rate.

During the first three years after my appointment as Medical Officer of Health, and prior to the passing of the Public Health Act of 1875, the Death-rate of the Borough averaged 26·0. With the putting into operation of the provisions of that Act the inspectorial staff was very greatly increased, and sanitary measures were more actively prosecuted; to these facts may fairly be attributed to a considerable extent the almost marvellous reduction since observable in our Death-rate, the mean of which since that period has been only 21·5.

Perhaps this gratifying diminution in our mortality cannot be more strikingly illustrated than by bringing again under your notice the immense saving of life which has thus resulted. I find that if our Death-rate had remained during the ten years which have elapsed since the passing of the Public Health Act at the same level as it stood, on an average, during the three preceding years, no fewer than 17,715 persons who

Saving of Life.

Saving of Life
(Continued).

are now living would have died ; while if last year's Death-rate had corresponded with the average rate observed in the years 1873-75, instead of the Deaths numbering 8,156, they would have totalled 11,121, or 2,965 more. Calculated on Dr. Farr's estimate of the average value of human life—£159—the total value of the lives computed to have been saved during the past ten years reaches the startling sum of £2,816,685, and this vast amount takes no account of the still greater amount of sickness and suffering which the people of this town have also been spared.

Last year's mortality was at such a rate that of 52·4 persons living one died during that period ; this proportion is considerably lower than that of the previous year, when the ratio was one in 47·5.

Mortality in
Institutions.

The death-rate of the several Institutions in the Borough, exclusive of the Workhouse, is 1·5 ; inclusive of that Institution it is 3·0 per 1,000 of the total Borough population.

Discrepancy
between
Registrar-
General's and
own figures.

As hitherto, my recorded number of Deaths and Death-rate will not be found to quite agree with those set forth in the Reports of the Registrar-General. The discrepancy is an unfortunate one, but, as the method adopted by the Registrar-General does not appear to be altogether a proper one to employ in the case of our Borough, I do not feel justified in altering the practice I have hitherto followed, of judging the Borough mortality by the number of Deaths registered in it. The Registrar-General debits our town with all deaths of paupers who have been removed from the Borough to Workhouses outside and there have died. To anyone acquainted with the Borough, however, it is obvious that many cases of accident and of sickness in persons non-resident in the Borough are treated in our numerous Hospitals, of which a certain percentage of course prove fatal, and go to swell the Borough mortality, and to at least neutralise any effect produced on the Death-rate by the exclusion from our mortality statistics of the records of those whose home is in the Borough, but who succumb in Institutions outside it.

Until, therefore, it shall become practicable to eliminate from our Death Returns the records of those who avail themselves of our Hospitals and chance to die there, it seems to me better to make no correction at all than to make one which is altogether one-sided, and cannot fail to aggravate rather than to remove any inaccuracy that may exist under the plan I now adopt.

In the following Table is given the estimated population, the number of persons per acre, the gross numbers of Births and Deaths, and the Birth and Death-rates for each of the last twenty-one years :—

Year.	Population Estimated in the middle of each year.	Density. Persons per acre.	Births.	Deaths.	Annual Rate per 1,000 living.	
					Births.	Deaths.
1865	{ The Estimate of Population in these years is not to be relied on. }	—	12,699	8,014	38·9	24·5
1866		—	12,877	8,042	38·5	24·0
1867		—	13,029	8,318	38·0	25·6
1868		—	12,992	8,548	36·3	25·9
1869		—	12,779	7,737	35·5	23·1
1870		—	12,922	7,805	35·0	23·0
1871	344,980	41·1	13,443	8,594	39·0	24·9
1872	350,164	41·7	14,123	8,048	40·5	23·1
1873	355,540	42·4	14,497	8,990	40·8	24·8
1874	360,892	43·0	14,888	9,665	41·2	26·8
1875	366,325	43·6	14,862	9,668	40·6	26·3
1876	371,839	44·3	15,816	8,330	42·5	22·4
1877	377,436	44·9	16,001	9,038	42·4	23·9
1878	383,117	45·6	15,964	9,662	41·7	25·2
1879	388,884	46·3	15,846	8,650	40·0	21·8
1880	394,738	47·0	15,111	8,088	38·3	20·5
1881	402,296	47·9	14,869	7,938	37·0	19·7
1882	408,532	48·6	14,866	8,425	36·4	20·6
1883	414,846	49·4	14,701	8,714	35·4	21·0
1884	421,258	50·1	14,991	9,043	34·9	21·1
1885	427,769	50·9	14,383	8,156	33·6	19·1

The last two columns of the above statement show at a glance how very considerable has been the fall in both the Birth and Death-rates since the year 1877.

The statement below affords a comparison of our Death-rate with that of nine other of the largest English towns during each of the past thirteen years :—

Twenty large English Towns.	London	L'pool	BIRM.	Manch.	Leeds	Sheffld	Salford	N'castle	Nor'w'h	Bristol	Comparative Death-rate of Birmingham and large towns.
1885... 20·4...	19·6	23·7	19·1	26·4	19·9	20·6	21·0	26·0	20·2	19·6	
1884... 21·4...	20·3	25·1	21·1	26·3	24·1	22·3	22·2	23·0	21·1	18·3	
1883... 21·7...	20·4	26·6	21·0	27·6	23·2	22·9	22·3	25·4	19·6	17·8	
1882... 22·6...	21·4	26·5	20·6	26·8	23·2	21·7	23·2	23·1	20·6	19·2	
1881... 21·7...	21·2	26·7	19·7	25·5	21·6	21·1	22·6	21·8	19·5	19·6	
1880... 22·6...	22·2	27·3	20·5	25·4	21·0	21·1	25·9	22·0	24·7	20·1	
1879... 23·2...	23·3	27·1	21·8	26·9	22·6	21·3	24·9	23·6	22·0	21·1	
1878... 24·4...	23·5	29·4	25·2	27·9	23·8	25·0	25·6	23·8	24·6	21·4	
1877... 22·8...	21·9	26·5	23·9	27·4	22·3	21·9	25·1	22·4	21·0	21·8	
1876... 23·6...	22·3	27·6	22·4	29·2	25·1	24·3	31·9	22·8	21·9	22·6	
1875... 25·4...	23·7	27·5	26·3	29·9	26·4	24·8	31·5	26·1	24·5	26·8	
1874... 25·4...	22·5	32·0	26·8	30·4	28·7	26·9	29·6	29·2	23·5	22·7	
1873... 24·4...	22·5	25·9	24·8	30·1	27·6	25·8	29·3	30·1	21·5	23·1	

On comparing our Death-rate for the year under review with that of the other large towns given in the Table, it will be noticed that ours heads the list in point of lowness, being 0·5 per 1,000 below that of any of the other towns. It is

Death-rate of
large towns
(Continued).

really remarkable that a large manufacturing town like Birmingham should compare so favourably with other towns similarly circumstanced. Two other features in the Table seem worthy of notice, one is the marvellous and almost uninterrupted diminution so long observable in the Death-rate of Salford, and the other, that the rate of mortality of the twenty-eight largest English towns taken as a whole also continues to decline, the past year's rate being exactly one per thousand under that of 1884, and no less than five per thousand, or practically twenty per cent. below the rates recorded ten and eleven years ago.

The number of Deaths, distinguishing sex, and the Death-rate for each quarter of the year, as well as the totals for the year, and for the four preceding years, are stated below:—

	1st Quar.	2nd Quar.	3rd Quar.	4th Quar.	Total 1885.	Total 1884.	Total 1883.	Total 1882.	Total 1881.
Total ...	2,320	2,093	1,828	1,915	8,156	9,043	8,714	8,425	7,938
Males ...	1,223	1,106	976	1,009	4,314	4,797	4,536	4,337	4,049
Females ...	1,097	987	852	906	3,842	4,246	4,178	4,088	3,889
Death-rate	21·69	19·57	17·09	17·91	19·07	21·06	21·01	20·62	19·73

The Death-rate of the first quarter of 1885 contrasts with an exceedingly low one in the winter quarter of 1884, which had a rate of mortality of only 19·89 against one of 21·69 in the corresponding period of the year under notice. The rate of mortality of the second quarter was practically one per 1,000 lower than that of the previous spring quarter, and the same feature is observable with regard to the third and fourth quarters, which had Death-rates six and three per 1,000 below those recorded in the corresponding quarters of 1884.

Connection
between health
and climatic
conditions.

These differences in the rates of the several quarters of the last two years are, as is most frequently the case, largely the consequence of atmospheric influences, the Death-rate of one of the last two years presenting a great contrast with the other. There can be no doubt that the higher Death-rate of the first quarter of 1885 resulted from the fact that a large portion of the first three months of the past year had a distinctly low temperature, while the temperature of the first three months of 1884 was unusually high. The effect of this relatively cold weather is seen in the difference in the mortality from diseases of the respiratory organs in the winter quarters of 1884 and 1885, that of 1884 having a Death-rate from this cause of only 4·8 per 1,000 persons, against a rate of 6·2 in the winter quarter of 1885.

The wide difference in the Death-rates of the last two summer quarters forms, however, the most remarkable feature connected with the statistics of the past year. Here again much is doubtless attributable to the part played by the

weather, which in these two summer quarters was generally of a distinctly opposite character. July, 1885, had a few hot days, and a temperature nearly identical with that observed in the preceding July. Here, however, the similarity of the last two summer quarters entirely ceases, for while August, 1884, was an exceptionally warm month, and had a temperature as much as $3^{\circ}6$ above the average, the mean temperature of last August was in deficit by exactly the same amount, the difference in their temperatures thus being no less than $7^{\circ}2$. September was also a cold month, having a temperature $0^{\circ}9$ below the mean of this month in the 20 years, 1861–1880, and $3^{\circ}6$ below that of the same month of the preceding year. As a result largely of the unusually cool August, the month when Diarrhoea is invariably most fatal in Birmingham, the Death-rate from this cause during the summer quarter was only 3.1 against the high figure of 7.6 in the warm quarter of the preceding year, while the Death-rate from all causes during the first-mentioned period was only 17.1 against 23.2 in the last-stated period. Thus three-fourths of the great reduction here observable in the total Death-rate is the result of the diminution of the Diarrhoeal mortality alone. To shew with what closeness the variations in the mortality followed upon the different phases of the weather, a chart will be found as usual at the beginning of the report, indicating the height of the barometer, average direction of the wind, the maximum and minimum readings of the thermometer, and the amount of rain, along with the number of Deaths from all causes, on each day of the year. The general meteorological features of 1885, however, so far as they are calculated to influence the Death-rate may be thus summarised.

Connection
between health
and climatic
conditions.
(Continued).

The first month of the year was rather cool with a great predominance of easterly winds, generally, however, of little force, and unaccompanied by any extremely low temperatures. February was characterised by unusual mildness, while the weather of March, on the other hand, was generally cold, and often associated with keen northerly and easterly winds. This varying and trying character of the weather continued till the close of July, for the first half of April was cold and sometimes excessively so for the time of the year, while the latter portion was generally warm and for a few days exceptionally so; with May, however, came a renewed and long spell of very cold winds from the north-west and the east, and this lasted till the closing days of the month, from which time till the end of July short periods of hot weather were succeeded by others nearly equally cold. After the end of July the mean daily temperature was for the most part below the average, the whole month of August and portions of each of the other months having some very cold spells of weather for the time of the year. Mainly owing probably to the circumstance that the weather of the last three months of

Connection
between health
and climatic
conditions.
(Continued).

1884 was favourable to the production of diseases of the respiratory organs, the deaths from Bronchial affections during the closing months of the year were fewer than in the corresponding period of the previous year.

Distribution of
deaths among
Registration
Sub-Districts.

The number of Deaths in each of the eight Registration Sub-Districts in each quarter of 1885, and in that and the three preceding years, together with the Death-rate of each Sub-District during the past year, have been as follows :—

	1st Quar.	2nd Quar.	3rd Quar.	4th Quar.	Total Deaths 1885.	Total Deaths 1884.	Total Deaths 1883.	Total Deaths 1882.	Death- rate 1885.
Ladywood ...	274	247	212	234	967	1,088	1,004	971	17·7
St. Thomas ...	220	199	175	182	776	907	828	818	20·2
St. Martin ...	200	223	194	192	809	870	812	863	19·8
St. George ...	438	348	331	332	1,449	1,606	1,548	1,567	22·6
All Saints ...	466	354	285	336	1,441	1,654	1,682	1,501	27·4
Deritend ...	359	372	346	319	1,396	1,469	1,408	1,365	15·2
Duddeston ...	282	280	230	253	1,045	1,166	1,186	1,100	17·5
Edgbaston ...	81	70	55	67	273	283	246	240	10·8

On comparing the actual number of Deaths recorded in each Sub-District during the year under review with that recorded in the previous year, it will be found that in each Sub-District, without exception, fewer deaths occurred in 1885 than in the preceding year. The least reduction is observable in the Sub-District of Edgbaston.

The Death-rates given above are based on the assumption that the rate of movement of the population of each Registration Sub-District observed between the last intercensal period has continued from 1881 till the middle of last year.

At the last Census it was found, however, that the estimated populations of the several Registration Sub-Districts, which were calculated on the supposition that the rate of movement which prevailed in each Sub-District during the decade 1861–71 had been exactly maintained during the succeeding decade, were in most cases far from correct, and there can be no doubt that a similar state of affairs will be realised at the taking of the next Census, and would be manifest now to a much smaller extent, if one were to be taken.

Cause of death-
rates of certain
Sub-Districts
appearing too
high.

Those districts, too, which have Hospitals and the like situated within their boundaries have their Death-rates, as furnished by the gross number of Deaths recorded within them, very seriously augmented by the fact that in such Institutions many deaths occur in persons who have not hitherto resided in the locality.

To accurately obtain the distribution of the Deaths among the several Registration Sub-Districts of the Borough, it is necessary to know the previous residences of those who die in the various Institutions, because without this knowledge not only is it impossible to allot to each district the Deaths that occur in the various Borough Institutions, but I am also unable to correct the total recorded Deaths in the Borough by deducting from them those in persons who have been inmates of our Hospitals, and have succumbed there, but who came from districts beyond the Borough. Without this desirable information I am forced, in order to fairly estimate the mortality of each Sub-District, to entirely disregard the Deaths in Institutions, and to calculate their respective Death-rates by the number of Deaths that have been recorded outside their walls. It thus happens that the Death-rate of the Registration Sub-District of Ladywood, which is made to appear by the inclusion of the mortality in the Children's Hospital as being 17·7, actually stands, by the exclusion of the Deaths in that Institution, at 16·3. Similarly, the Death-rates of the Sub-Districts of Saint George and Saint Thomas are, by the elimination of the Deaths in the General and Queen's Hospitals, reduced from 22·6 to 18·2 and from 20·2 to 15·5, respectively.

Distribution of
deaths among
Registration
Sub-Districts
(Continued).

The most striking fall in the Death-rate, however, by this method of treatment invariably occurs in the Sub-District of All Saints, which contains the Small-pox and Scarlet Fever Wards of the Borough Hospital, the Gaol—in which, however, few Deaths take place, only three being registered in the twelve months under review—the Lunatic Asylum, and the Workhouse. In both of the two Institutions last mentioned, more especially in the Workhouse, there is always unfortunately a large number of people, among whom the mortality is decidedly high. The subtraction of the Deaths in the Institutions situated in this Sub-District from its total mortality brings down its Death-rate to one-half of that which it would otherwise appear to be, viz., from 27·4 to 13·6.

This mode of procedure does not produce, however, altogether satisfactory results, apart from the fact that the inmates of these Institutions, particularly of the Workhouse, are necessarily drawn unequally from the various portions of the Borough, because at the time the last Census was taken a certain number of persons occupied these Institutions, and formed a part of the enumerated population of the respective Sub-Districts in which these happened to be located.

In all fairness, therefore, if we subtract the Deaths in these Institutions from the total mortality of the respective Registration Sub-Districts in which they are situated, we ought also to make allowance for the mean number of inmates during

Distribution of
deaths among
Registration
Sub-Districts
(Continued).

the same period. In some instances the number then observed was comparatively so small as not to very seriously vitiate the results obtained by disregarding it, but in the case of the Sub-District of All Saints the matter is altogether different, for there the number of persons occupying Institutions is always a very considerable one, for at the last Census it was found that there were 2,427 inmates in the Workhouse, 751 at the Lunatic Asylum, and 595 at the Gaol, all of which are situated in this Sub-District.

The corrections for each Sub-District containing a Hospital or the like are therefore somewhat one-sided, and result notably in the circumstance that the low Death-rate of All Saints is by this plan made to appear somewhat lower than it actually is.

Distribution of
Deaths among
the Wards.

The distribution of deaths among the sixteen Wards of the Borough for each quarter of 1885, as well as for the whole of that year and the three preceding years is given below :—

	1st Quar.	2nd Quar.	3rd Quar.	4th Quar.	Total 1885.	Total 1884.	Total 1883.	Total 1882.
Rotton Park (W., B.H.) ...	342	282	223	250	1,097	1,211	1,315	1,093
All Saints (L.) ...	156	129	113	114	512	669	561	587
Ladywood (H.) ...	153	140	123	131	547	605	539	506
St. Paul ...	109	73	70	90	342	410	357	367
St. George...	123	90	88	98	399	460	585	541
St. Stephen ...	131	101	105	98	435	532	330	418
St. Mary (H.) ...	191	193	146	154	684	682	739	684
St. Bartholomew ...	142	146	144	126	558	507	596	608
Market Hall ...	80	62	57	72	271	278	243	280
St. Thomas ...	154	144	121	141	560	653	590	571
St. Martin ..	97	118	97	91	403	469	361	401
Edgbaston ..	103	79	65	70	317	318	313	298
Deritend ...	113	135	107	108	463	521	551	515
Bordesley ...	178	170	163	156	667	697	593	604
Duddeston ...	103	103	90	112	408	466	499	442
Nechells ...	145	128	116	104	493	565	542	510

Ward
population.

The figures have not the value they would possess if the populations of the Wards were known, for then their Death-rates could be given.

Distribution of
Deaths among
the aetal periods.

The next statement gives the number of Deaths at certain aetal periods for each quarter of 1885, and the totals for that and the three preceding years :—

	1st Quar.	2nd Quar.	3rd Quar.	4th Quar.	Total 1885.	Total 1884.	Total 1883.	Total 1882.	Distribution of Deaths among the aetial periods (Continued).
Under 1 year of age ...	566	556	634	497	2,253	2,611	2,338	2,452	
Between 1 and 5 years	378	291	235	251	1,155	1,704	1,480	1,527	
" 5 " 20 "	108	134	114	121	477	578	688	596	
" 20 " 40 "	284	284	220	265	1,053	1,081	1,115	1,028	
" 40 " 60 "	467	403	313	327	1,510	1,472	1,389	1,363	
At 60 years and upwards	517	425	312	454	1,708	1,597	1,704	1,459	

A marked contrast is observable in the relative distribution of the figures among the several periods of life during the last two years. In 1884 the most conspicuous feature was the unusually high proportion of deaths under one year of age, and to a less extent in children between one and five years of age; in that year, too, there were fewer deaths than usual in persons above 60 years of age. This year's figures show, however, a return to the more natural and usual order of distribution generally found to exist at the several periods of life, the most uncommon feature being the exceptionally few deaths in children whose ages ranged between one and five years. This strikingly small mortality amongst children of these ages, as compared with previous years, is the result mainly of the comparatively low mortality from Measles, Whooping-Cough, and Scarlet Fever, which are essentially diseases of childhood; the small amount of Diarrhoeal mortality has also contributed to bring about not only this result, but also the smaller number of deaths than in other years in the table in infants under one year of age. The Deaths in persons between 5 and 20 years of age also show a very distinct reduction on those of recent years, and in persons between 20 and 40 years of age a slight decline on the previous year. The Deaths in people over 40 years of age have, however, been decidedly more numerous than usual, though this is not to be wondered at when the trying character of the weather at the beginning and end of the year is taken into account. I have compared the figures on pages 38-40 with those of the previous year, and find, however, that only a comparatively small proportion of last year's excessive mortality in persons above 60 years of age is attributed to Bronchial affections, as the Deaths of no fewer than 104 more old people than in the previous year are set down under the indefinite term of "Old Age." Such an exceptional increase could not be brought about by any variation which is liable to arise from accidental causes, and there can be no doubt that any marked loss of vitality which may have contributed to produce the Deaths of so many old people must have been induced by atmospheric conditions.

The average Age at Death during each quarter of this and the previous year is as follows:—

	1884.				1885.			
First Quarter . .	27	years and	7	months.	30	years and	7	months.
Second " ...	26	"	9	"	29	"	4	"
Third " ...	20	"	5	"	25	"	5	"
Fourth " ...	27	"	3	"	30	"	9	"
Whole Year ...	25	"	6	"	29	"	2	"

Average Age at
Death
(Continued).

The mean age of those who died during the year is very pronouncedly higher than in the previous year, and not only so, but higher than in any year in my records. The mean age at death was not only greater on the average of the whole year, but in each quarter of it, though, as one would expect considering the relatively small number of Deaths from Infantile Diarrhoea in the third quarter, the most considerable increase was experienced in that portion of the year. The increased age at death during 1885 is attributable partly to the fewer, and consequently smaller ratio of, Deaths in children under five years of age, the result of the fact that the Deaths from those zymotic diseases, particularly from scarlet fever, which generally prove so destructive to the lives of children, have been far less numerous than hitherto; and partly to the excessive mortality in aged persons during the first, second, and fourth quarters of the year.

INFANT MORTALITY.

Infant
Mortality.

The number of deaths registered last year in infants under one year of age is 2,253; this is equal to 15·7 per cent. of the Registered Births, and, based on my estimated number of infants under one year of age living in the Borough, to a rate of mortality of 170·2 per 1,000 living at that age, against 203·9 in the previous year. The ratio that the mortality of infants under one year bore to the Registered Births in the whole of England and Wales during 1885 is 13·8 per cent.

Percentage of
Infant Deaths
on Births.

The percentages of Deaths of Infants under one year of age on the Births registered in Birmingham and the principal large English towns during the last ten years are stated below:—

	Twenty large English Towns.	London.	L'pool.	BIRM.	Manch.	Leeds.	Sheff'd.	Salford.	N'castle.	Norw'h.	Bristol
1885...	15·4...	14·8	17·4	15·7	17·5	15·5	16·4	17·4	17·2	13·5	15·2
1884...	16·7...	15·5	19·4	17·4	18·3	18·4	17·2	18·4	15·6	18·7	14·3
1883...	15·9...	14·6	18·6	15·9	17·7	16·7	16·3	17·1	16·7	15·1	13·4
1882...	16·1...	15·1	17·8	16·5	17·9	18·0	16·5	17·8	16·6	16·9	14·2
1881...	15·2...	14·8	17·3	15·0	16·1	16·7	15·5	16·3	15·3	14·7	12·5
1880...	17·0...	15·8	19·1	17·2	18·0	17·4	16·5	20·0	17·1	21·6	14·6
1879...	15·1...	14·8	16·3	15·0	16·5	16·1	15·3	17·0	14·5	15·9	14·5
1878...	17·2...	16·4	19·3	17·0	17·5	18·8	17·6	18·5	16·1	21·1	16·0
1877...	15·4...	14·6	18·8	16·4	16·1	16·5	16·1	16·1	15·1	15·4	15·4
1876...	16·7...	15·7	20·8	16·0	18·0	18·1	16·9	18·9	16·7	17·8	15·3

It will be noticed that in proportion to the number of children born during the past year fewer have died than in any previous year except two, namely 1879 and 1881. As compared with 1884 there is a distinct reduction, for last year's infant mortality, particularly when gauged by the number of births, was exceptionally high.

A somewhat larger percentage of infants under one year continue to die in Birmingham than in the twenty large English towns as a whole, in fact our infant mortality remains decidedly the least satisfactory feature in our statistics.

Percentage of
Infant Deaths
on Births
(Continued).

The percentages of deaths in infants under one year on the deaths at all ages in the principal large English towns during the same period of time has been as follows:—

Percentage of
Infant Deaths
on total Deaths.

Twenty large English Towns.	London.	L'pool.	BIRM.	Manch.	Leeds.	Sheff'ld.	Salford	N'castle.	Norw'h.	Bristol	
1885...	25.1...	24.5	24.6	27.6	24.0	26.8	27.7	28.3	25.3	22.5	24.0
1884...	26.8...	25.7	27.1	28.9	25.1	26.4	28.3	29.4	26.7	30.1	24.5
1883...	25.6...	24.2	24.5	26.8	23.0	24.8	26.1	27.2	24.1	26.1	24.0
1882...	25.6...	24.3	24.5	29.1	24.6	27.8	28.4	24.0	26.9	27.7	24.4
1881...	24.9...	24.1	24.4	27.7	23.3	28.5	27.9	27.9	25.8	25.5	22.0
1880...	26.8...	25.7	26.7	32.1	24.0	29.4	27.5	29.3	28.0	30.0	24.0
1879...	23.9...	23.2	23.3	27.5	22.4	26.3	25.6	27.3	22.6	24.7	24.7
1878...	26.5...	25.2	25.5	28.6	24.0	31.0	26.5	30.5	25.8	28.7	26.4
1877...	25.5...	24.1	27.5	29.1	22.6	29.7	25.5	27.1	26.6	24.7	25.4
1876...	26.9...	25.7	29.6	30.5	24.5	29.9	28.6	29.2	30.4	27.0	25.5

Last year's infant mortality shows a smaller percentage on the total Deaths than in the previous year, and not only so but a lower proportion than in any of the ten preceding years with the exception of two; it still, however, bears a higher ratio to the deaths at all ages than is shown by the figures for any of the towns given in the above table, excepting only Salford and Sheffield.

It is not open to question that the smaller percentage of infant mortality observable not only in Birmingham but throughout the country generally, is the consequence of the reduced fatality, particularly as compared with the previous year, of summer Diarrhœa.

Cause of
smaller Infant
Mortality.

The Deaths of children under five years of age numbered 3,408 against 4,315 in 1884; the percentage on total Deaths is lower than in any previous year in my records, only 41.8 against 47.7 in 1884. The comparison with a series of ten years is given in Table II. Compared with the number of children born during the year it gives a mortality of 23.7 per cent., so that during the past year when fewer children died than usual, nearly one-fourth failed to attain five years of age. It is undeniable that a considerable part of this sacrifice of life on its very threshold is in various ways preventable.

Deaths under
five years.

Population and Deaths at certain ætal periods.

TABLE SHOWING POPULATION AND NUMBER OF DEATHS OF PERSONS MALES AND FEMALES, AT ALL AGES, AND AT FIVE GROUPS OF AGES, DURING THE YEAR 1885.

	PERSONS.		MALES.		FEMALES.	
	Estimated Population, 1885.	Deaths, 1885.	Estimated Population, 1885.	Deaths, 1885.	Estimated Population, 1885.	Deaths, 1885.
All ages... ..	427,769	8,156	207,183	4,314	220,586	3,842
Under 5 years ...	62,746	3,408	31,253	1,853	31,493	1,555
5 to 20 „ ...	140,084	477	68,383	246	71,701	231
20 to 40 „ ...	131,617	1,053	62,862	575	68,755	478
40 to 60 „ ...	70,506	1,510	34,532	810	35,974	700
60 and upwards..	22,816	1,708	10,153	830	12,663	878

Death-rates at certain ætal periods.

TABLE SHOWING RATE OF MORTALITY PER 1,000 PERSONS MALES AND FEMALES, LIVING DURING 1885, AT ALL AGES, AND AT FIVE GROUPS OF AGES, COMPARED WITH THE ENGLISH LIFE TABLE RATES (FARR).

	PERSONS.		MALES.		FEMALES.	
	Birming-ham.	English Life Table.	Birming-ham.	English Life Table.	Birming-ham.	English Life Table.
All ages... ..	19·1	21·5	20·8	22·4	17·4	20·7
Under 5 years ...	54·3	65·7	59·3	70·1	49·4	61·3
5 to 20 „ ...	3·4	7·1	3·6	7·0	3·2	7·2
20 to 40 „ ...	8·0	10·3	9·1	10·1	7·0	10·5
40 to 60 „ ...	21·4	18·3	23·4	19·4	19·5	17·2
60 and upwards	74·9	71·7	81·7	73·9	69·3	69·7

The disparity between the mortality among males and females which was last year very great in Birmingham, is this year somewhat less pronounced, though the death-rate in

males is still 3·4 per 1,000 higher than that of females; in the English Life Table the male rate is set forth as 1·7 per 1,000 higher than the female. By far the most striking difference in the rates, as compared with those of the previous year, is manifested in children under five years of age, for while last year the death-rate at this period of life was three per thousand above that of the English Life Table, it is now so much as 11·4 below that rate.

Death-rates at
certain ætal
periods
(Continued).

There is still observable a remarkable disproportion in the death-rates of the two sexes at these early ages, the rate in male children being practically 10 per 1,000 above that in female children; in the preceding year the contrast was even greater, for then 12·5 per 1,000 more male than female children died at these ages.

At the next period of life, that between 5 and 20 years of age, the death-rate shows a further reduction on that of each of the two preceding years, and is now remarkably low—less than one-half that given in the Life Table.

The figures for our town compare favourably with the rates in the English Life Table also at the ætal period between 20 and 40, though, as in the two preceding years, the mortality among male adults at these ages is considerably more than that among females at this portion of life. This is contrary to what has been observed in the whole country, for there the female somewhat exceeds the male mortality at these ages; the fact, however, that Birmingham is a town employing an immense amount of machinery, from which a number of fatal accidents annually arise, would tend to produce a higher death-rate among male adults than is found in England as a whole.

Our rates of mortality in persons above 40 years of age, however, do not come out so well as those for the whole country, and were last year higher than in the previous year. At these ages, too, there is a very pronounced difference in male and female mortality, and this is most clearly exemplified by the death-rates in persons of both sexes aged 60 years and upwards, for while our death-rate among males at this portion of life is 7·8 per 1,000 higher than that in the Life Table, amongst females it is actually a little lower. The more than usually heavy mortality among elderly people is what one would expect to find after the unfavorable climatic influences of the past spring and autumn.

In the following table are set forth particulars of Infant Mortality, and the Deaths and death-rates from all causes and from the seven principal Zymotic diseases, together with the mortality in children under five years of age and in persons over sixty years, during the past and the preceding twelve years:—

ANALYSIS OF THE MORTALITY IN THE BOROUGH OF BIRMINGHAM IN EACH OF
THE THIRTEEN YEARS, 1873 TO 1885.

YEAR.	Deaths of Infants under 1 year.	Proportion of Deaths under 1 year to 1,000 births.	DEATHS.				Annual rate per 1,000 living.			
			AT ALL AGES.		FROM ALL CAUSES.		AT ALL AGES.		FROM ALL CAUSES.	
			From all Causes.	From Seven Zymotic Diseases.	Of Children under 5 years.	Of Persons over 60 years.	From all Causes.	From Seven Zymotic Diseases.	Of Children under 5 years.	Of Persons over 60 years.
1873	2627	181	8990	2042	4424	1521	24·8	5·6	12·4	4·3
1874	2688	178	9665	2652	4589	1459	26·8	7·3	12·7	4·4
1875	2957	196	9668	2145	4785	1590	26·3	5·9	13·0	4·3
1876	2537	160	8330	1336	3881	1441	22·4	3·6	10·4	3·9
1877	2628	164	9038	1576	4460	1521	23·9	4·2	11·8	4·0
1878	2766	170	9662	2421	5128	1506	25·2	6·3	13·4	4·0
1879	2385	150	8650	1251	4095	1686	21·8	3·2	10·5	4·3
1880	2601	172	8088	1324	4043	1397	20·5	3·4	10·2	3·5
1881	2212	150	7938	1128	3741	1506	19·7	2·8	9·3	3·7
1882	2452	165	8425	1413	3979	1459	20·6	3·4	9·8	3·7
1883	2338	159	8714	1306	3818	1704	21·0	3·1	9·2	4·1
1884	2611	174	9043	1681	4315	1597	21·1	3·9	10·0	3·7
Average 1873 to 1884	2567	168	8851	1690	4272	1532	22·8	4·4	11·1	4·0
1885	2253	157	8156	876	3408	1708	19·1	2·0	8·0	4·0

Full details of the Mortality may be found in Table A, on
pages 38-40.

SPECIFIED CAUSES OF DEATH.

Specified causes
of Death.

During the past year the Deaths have been distributed
among the eight classes into which the diseases are now
divided by the Registrar-General, thus :—

Class	I.—Zymotic Diseases	...	983, or 12·1 per cent. of total mortality.
"	II.—Parasitic	"	9, or 0·1
"	III.—Dietic	"	57, or 0·7
"	IV.—Constitutional Diseases	...	1,252, or 15·4
"	V.—Developmental	"	729, or 8·9
"	VI.—Local	"	4,105, or 50·3
"	VII.—Violent Deaths	...	357, or 4·4
"	VIII.—Deaths from ill-defined and not specified causes	...	664, or 8·1

As compared with the figures for the previous year, I find that the actual numbers of Deaths from Dietic and Developmental Diseases have increased, while those from each of the other groups are fewer in number. The most noteworthy point brought out by a review of the figures for the last two years is manifested in Class I., Zymotic Diseases, from which 1,805 Deaths, or exactly one-fifth of the total mortality were returned in 1884, while this year the mortality in this class was only 988, or less than one-eighth of that from all causes. Owing to the large reduction in the Deaths in this class, the percentages of the Deaths in the other classes to the total mortality are made relatively much higher than they would be. For instance, though the Deaths from Local Diseases are actually fewer than last year, their proportion to the mortality from all causes has risen from 45·7 in 1884 to 50·3. The numbers of Deaths in the two great classes of disease, Constitutional and Local, agree very closely with those recorded in the previous year, while that in the Developmental class shows an appreciable increase. As a matter of fact, however, the aggregate number of Deaths in Classes II. to VIII., both inclusive, is only slightly lower than that in the previous year, the number for 1884 being 7,238, and that for 1885, 7,173, more than the whole of which difference is accounted for by the fact that the Deaths from ill-defined and not specified causes were, in 1885, much fewer than usual.

Specified causes
of Death
(Continued).

Clearly then, disregarding the non-and imperfectly-specified causes of Death, the whole of the large reduction observable in last year's mortality, as compared with that of 1884, is referable to the zymotic class of disease, which embraces a dozen diseases other than the seven principal ones, most of which occasion only a comparatively small and pretty constant mortality. It is, therefore, quite obvious that to the reduction in the mortality of the seven principal zymotic diseases must be attributed the whole of the great saving of life happily effected during the year under review.

CLASS I.—ZYMOTIC DISEASES.

The Deaths in this class, which embraces not only the seven principal zymotic diseases referred to in detail in the next and following paragraphs, but also a number of minor diseases, chiefly of a Malarial, Venereal, or Septic character, numbered, as stated above, 983, and were equivalent to an annual Death-rate of 2·3 per 1,000 persons, against 4·2, the rate of the previous year. The whole of this diminution is due to a greatly lessened mortality from

Zymotic
Diseases.)

THE SEVEN PRINCIPAL ZYMOTICS,

viz., Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, and Diarrhœa, which have resulted in only 876 Deaths, a decidedly lower number than in any previous year

Seven principal
Zymotics.

Seven principal
Zymotics
(Continued).

embraced by my records, which go back to 1870. The number of Deaths from these diseases in 1884 was 1,681; in 1883, 1,306; in 1882, 1,413; and in 1881, 1,128, this latter number being the lowest in my records for any year prior to the one under review. In the six years between 1873 and 1878, both inclusive, when the population of the Borough was very considerably smaller than it is now, the average annual number of Deaths from these seven diseases was no fewer than 2,029, so that last year's number, notwithstanding a continual increase of population, is less than one-half that annually recorded on an average some ten years ago. This greatly diminished mortality is shared in by each member of the group, for the fatality of every one of these seven diseases has been considerably less than that observed on an average during the previous ten years.

Zymotic
Death-rate.

The Deaths registered under this heading during the year give an annual Death-rate of 2·0 per 1,000 of the population, as compared with rates of 5·6, 7·3, 5·9, 3·6, 4·2, 6·3, 3·2, 3·4, 2·8, 3·4, 3·1, and 3·9 in succession from 1873 to 1884. Last year's zymotic Death-rate is 0·8 below that of 1881, which has hitherto enjoyed the distinction of having a lower zymotic Death-rate in our Borough than any other year on record; in that year, however, a very cool summer, with the concomitant low Diarrheal Death-rate, contributed to this happy result.

Zymotic death-
rates of large
towns.

In the following Table the zymotic Death-rates of the Borough during the past ten years are compared with those of most of the large English towns during the same period:—

	Twenty large English Towns.	London.	L'pool.	BIRM.	Manch.	Leeds.	Sheff'ld.	Salford.	N'castle.	Norw'h.	Bristol.
1885...	2·7...	2·8	3·6	2·0	3·1	2·2	2·7	3·4	4·4	2·1	2·3
1884...	3·5...	3·3	4·5	3·9	3·6	4·9	4·2	4·2	3·2	3·1	1·8
1883...	2·6...	2·8	4·5	3·1	3·6	4·0	4·0	3·3	4·3	1·0	1·2
1882...	3·9...	3·4	4·4	3·4	3·7	3·4	2·8	3·8	3·3	2·4	2·3
1881...	3·4...	3·6	4·5	2·8	2·3	2·9	2·7	2·9	2·6	1·7	2·3
1880...	4·0...	3·7	5·1	3·4	4·2	3·3	4·4	6·8	3·2	5·3	3·1
1879...	3·2...	3·3	6·0	3·2	3·4	3·3	3·5	4·0	3·9	2·2	2·1
1878...	4·4...	4·1	6·1	6·3	4·0	4·5	5·6	5·1	4·6	3·6	2·1
1877...	3·5...	3·5	4·7	4·2	4·2	2·8	3·3	4·8	2·5	2·9	3·4
1876...	4·1...	3·6	6·1	3·6	5·2	4·5	4·8	8·5	2·5	2·9	3·8

Our zymotic Death-rate for the past year will be seen from the above figures to be 0·7 per 1000 lower than the average rate of the twenty-eight large English towns, and lower than that of any one of the large towns given in the list. This is the first time I have been able to make so gratifying a record.

The percentage of zymotic Deaths on total Deaths in the same principal English towns during the last ten years has been as follows :—

Twenty large English Towns.	London.	L'pool.	BIRM.	Manch.	Leeds.	Sheff'd.	Salford	N'castle.	Norw h.	Bristol.	
1885...	13'3...	14'1	15'1	10'7	11'6	11'4	13'1	16'2	17'0	10'3	11'7
1884...	16'3...	16'4	17'8	18'6	13'6	20'2	18'6	18'9	14'0	14'7	10'0
1883...	12'0...	13'4	16'8	14'9	12'9	17'0	17'3	14'9	17'0	5'1	6'9
1882...	16'1...	16'3	16'6	16'5	14'9	15'1	11'5	16'8	14'4	12'0	12'3
1881...	15'5...	17'0	16'8	14'2	9'1	13'6	13'0	12'9	12'1	8'7	11'7
1880...	17'7 ..	16'8	18'6	16'4	16'4	15'7	21'0	26'2	14'4	23'7	15'4
1879...	13'8...	14'3	21'2	14'5	12'8	14'6	16'5	16'1	16'5	10'0	10'1
1878...	18'2...	17'6	21'9	25'1	14'3	19'0	23'6	19'9	12'2	14'5	10'0
1877...	15'4...	16'0	17'8	17'4	15'4	12'6	15'1	19'1	10'3	13'8	15'7
1876...	17'3...	16'1	22'1	16'0	17'8	17'8	19'6	26'6	11'0	13'2	17'1

The percentage of zymotic Deaths to total Deaths was last year slightly lower in Norwich than in Birmingham, but in each of the other towns it was higher. Norwich has a comparatively small population, and the figures relating to it are, therefore, more liable to wide fluctuations than those of larger towns, besides which its general Death-rate was higher than that of Birmingham, and this would render an equally high zymotic Death-rate, in proportion to total Deaths, lower than our own. As a matter of fact, as shewn by the previous table, the zymotic Death-rate of Norwich was slightly higher than our own; if its total Death-rate had been as low as that of Birmingham, its proportion of zymotic, to total mortality, would have been higher than ours.

The proportion of zymotic to total Deaths in Birmingham was, in 1884, 18·6 per cent., so that this year's percentage, 10·7, is strikingly lower than that of the previous year. It is also nearly 25 per cent. under the lowest figure of any previous year, which was 14·2 in 1881.

DIARRHŒA,

as is generally the case, has proved the most fatal disease of the zymotic class, though the actual mortality from this cause is lower than in any year in my records, with the exception of 1879, when a remarkably and unprecedentedly cold summer caused the Diarrhœal mortality of that year to stand at a lower figure than ever before observed. The Deaths from this cause have numbered 338, 236 of which, including one Death certified to be due to English Cholera, were registered in the third or warm quarter of the year; in the previous year 737 Deaths, including 559 in the summer quarter, were referred to this fatal infantile malady. The 338 Deaths classed under this heading give an annual rate of mortality of 0·8 per 1,000

Diarrhœa in
relation to
Temperature.

persons, as compared with a rate of 1·7 in 1884 ; the rate for the past summer quarter was 2·2, that of the preceding one being so high as 5·3. The remarkable difference in the amount of fatal Diarrhœa in the last two summer quarters is doubtless traceable to meteorological influences. In my last Annual Report I dwelt at length on the manifest connection between a high temperature and this disease ; the facts of the year under notice show that the absence of a prolonged high temperature is coincident with an unusually slight Diarrhœal fatality.

Some hot weather was experienced in July, but it suddenly collapsed at the end of the month, after which the temperature continued unusually low for the season of the year. As I pointed out in my last Annual Report, Diarrhœa attains its maximum mortality in Birmingham in August, so that whether our Diarrhœal mortality shall be more or less severe than usual depends largely on the temperature of this month, which during the past year was so much as 3·6 below the average of the last twenty Augusts.

By referring to the mortality table on page 38, it will be seen that, as hitherto, the very young and the aged suffered most ; 78 per cent. of the Deaths occurred in infants under one year of age, and 93 per cent. in children under five years of age ; thus only 7 per cent. of the mortality was in persons above five years of age, and 52 per cent. of this was in persons aged 60 years and upwards.

Following the practice of the Registrar-General, the Deaths classified under the heading of Diarrhœa not only include those from Dysentery with which it is grouped, but also those from Atrophy, Debility, Senile Decay, and other ill-defined forms of illness, in which Diarrhœa was given along with the primary cause of Death.

Dysentery.

As regards Dysentery, however, a Death from this cause in Birmingham is quite a rare event.

WHOOPING COUGH

Whooping
Cough.

occupies the second position in order of fatality, having occasioned 253 Deaths ; it has, however, been less fatal than it has generally been during the last ten years, the average annual number of fatal cases of this common disease of childhood during that period having been 320. Its fatal consequences have been spread widely over the Borough.

Comparatively small as was the number of deaths from this disease during the past year, it is certainly deplorable that so great a sacrifice of human life should have to be regarded as a matter of course, particularly when it is indisputable that

much of it might have been prevented if proper care were taken of the cases. The evident and common neglect to take precautions often, doubtless, arises from the fact that the disease is looked upon with so little dread, that serious complications are liable to supervene, making this disease one of the most fatal scourges with which children are afflicted.

Whooping
Cough
(Continued).

MEASLES

has been much less fatally prevalent than in 1884, and somewhat less so than on the average during the ten preceding years. One hundred and nineteen Deaths have been attributed to this cause; in the previous year so many as 333 Deaths were referred to this disease, while the average number recorded in the ten years, between 1874 and 1883, was 140. Until the closing weeks of the year this disease appeared tolerably quiescent, but it then suddenly became much more fatal.

Measles.

The incidence of the disease has not, however, been manifested at all equally over the various portions of the Borough, for the more eastern portion, particularly the district of Duddeston, has suffered far more severely than other parts. In my last Annual Report I stated, "it is remarkable that the Registration Sub-District of Duddeston, with a population of 58,000, and embracing the whole of the Wards of Duddeston and Nechells, and small portions of three other Wards, should have escaped its epidemic influence, for while the Death-rate from this infectious disease was equal to a rate per 1,000 of the population of 1.4 in the Registration Sub-District of Ladywood, and of 1.3, 1.2, and 0.9 in those of Saint Thomas, All Saints, and Saint George respectively, in the Registration Sub-District of Duddeston it was only 0.4." It thus follows that the very Sub-District which did not share to any great extent its fatal influences in 1884 has, this year, been the only one that has had a material loss of life from this cause, in fact the area which escaped the fatal effects of this disease in 1884 is exactly that which has this year been subject to its ravages.

A Map at the end of the Report indicates the position of each fatal case recorded during the year.

FEVER.

The Deaths from the three forms of this disease which are included under this heading amount to 77; 67 of these were ascribed to Typhoid, and 10 to Simple Continued Fever. Hitherto one or more Deaths have been set down as due to Typhus Fever. I have frequently stated my doubts as to cases of this disease occurring in this town; I am, therefore, glad to notice that no Death was so certified during the past year.

Fever.

Fever
(Continued).

Even more pleasurable is it to be in a position to announce that the Fever Death-rate of Birmingham manifests a further reduction on the low rates observed in recent years, as it is now only 0·18 per 1,000 of the population, against 0·19 in 1884, 0·20 in 1883, and 0·21 in 1882. It is remarkable that the rate should for three years in succession exhibit a reduction of exactly 0·01. Our Fever Death-rate also continues to compare favourably with that of the twenty largest English towns, which however shows a very considerable reduction on the rate recorded in the previous year, having fallen from 0·28 in 1884 to 0·22 last year. Perhaps no feature in the mortality statistics illustrates more forcibly the gain to health and life which has accrued from, or at all events been coincident with the improved sanitary condition of the country. The Death-rate from Fever in Birmingham, as seen by the figures in the statement below, which go back as far as the year 1870, is now considerably less than one-third of what it was in that year, while that of the twenty-eight largest English towns exhibits a still larger reduction, being less than one-fourth of its former amount.

A large diminution is also manifested in the whole of England and Wales, last year's rate being 0·21, that of the first five years of the current decennium 0·27, and that of the immediately preceding decennial period 0·48.

Map.

The fatal cases of this disease in the Borough are indicated on a Map at the end of the Report.

Fever Death-
rate.

The large reduction which the Fever Death-rate has undergone, not only in Birmingham, but also in other large centres of population, is illustrated by the following figures :—

		Per 1,000 per annum.					
		Birmingham.			20 large towns.		
1870	·63	...	...	...	·90
1871	·53	...	...	...	·78
1872	·54	...	...	...	·60
1873	·57	...	...	...	·59
1874	·56	...	...	...	·58
1875	·56	...	...	...	·52
1876	·40	...	...	...	·45
1877	·38	...	...	...	·42
1878	·38	...	...	...	·42
1879	·22	...	...	...	·29
1880	·21	...	...	...	·30
1881	·16	...	...	...	·31
1882	·21	...	...	...	·36
1883	·20	...	...	...	·33
1884	·19	...	...	...	·28
1885	·18	...	..	...	·22

The Death-rate from

DIPHTHERIA

is, however, somewhat higher than in the previous year, as the Deaths of 46 persons, against 40 in 1884, are attributed to this cause. A reference to the undergiven statement will show that though the rate is slightly higher than last year, and equal to that of 1883, it is lower than the rate of any previous year as far as the figures in the Table extend, and little more than one-third that of the first year in the statement—1873. It is also worthy of note that whilst the rate of the twenty largest English towns is practically double what it was in 1873, when Birmingham had a notoriously high Diphtheria Death-rate, our rate should have so declined during the same time that it is now considerably lower than the average of the twenty large English towns. It is only fair, however, to state that a large portion of the increased mortality of the twenty largest towns mainly arises from the fact that the Metropolis, which has nearly half the population of the whole twenty towns, has had for some years an exceptionally heavy Diphtheritic mortality.

The subjoined statement contains a comparison of the Diphtheria Death-rate of Birmingham and the twenty large towns during the last thirteen years:—

DEATH-RATE FROM DIPHTHERIA PER 1,000 OF THE POPULATION.

Birmingham.

1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885
·31	·21	·16	·16	·14	·22	·18	·13	·14	·12	·11	·09	·11

Twenty Large Towns.

·09	·16	·12	·09	·09	·13	·13	·12	·15	·17	·17	·18	·17
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

The Deaths from

SCARLET FEVER

have been most remarkably few, no approach to so low a mortality from this disease having hitherto been recorded in the annals of our Borough. Only 31 Deaths have been referred during the year to this often fearfully-destructive infectious disease, 9 of which were registered in the first quarter, 5 in the second, 10 in the third, and 7 in the fourth; thus not more than 10 children died from this cause in any one quarter of the year. The average annual number of Deaths from this cause recorded during the ten preceding years is 301, so that only 10 per cent. of this number were returned during the year under review. The lowest number of Deaths registered from this disease in any previous year, as far back as my records go, was 123 in 1880; when a severe epidemic prevailed

Scarlet Fever
(Continued).

in Birmingham in 1878, no fewer than 995 Deaths were attributed to this cause. The contrast between this figure and that for the past year, in respect to a disease which is always existent in the Borough, is nothing less than marvellous.

Map.

A Map at the end of the Report is marked with red spots to show the portions of the town affected during the year with fatal cases of this disease.

SMALLPOX

Smallpox.

was considerably prevalent in the Borough during 1883, and to a smaller extent in 1884, during which year it showed a distinct tendency to die out altogether. In the first quarter of 1885, however, an increased number of cases came to my knowledge, and twelve of them terminated fatally. During the remaining nine months of the year, however, very few cases were reported to the Department, and none of these proved fatal. The number of true cases of this disease reported to me during the year is 79, 64 of which occurred in the first quarter; the rate of mortality is 15.2 per cent. In the previous year there were 471 cases and 64 deaths.

Influence of
Vaccination on
Smallpox.

By the courtesy of Dr. Line, the Medical Superintendent of the Borough Hospital, I am again able to give particulars relative to the vaccination of the patients and its connection with the mortality. Dr. Line's figures show that of 63 vaccinated persons, four or 6.3 per cent. died; while of 12 unvaccinated, no fewer than 7, or 58.3 per cent., died.

With the object of showing how the mortality of the so-called vaccinated depends on the degree of vaccination, I have constructed the following Table. It is similar to that in my last Annual Report, and gives side by side with the percentage of Deaths in each class in our Borough Hospital the percentages observed in the same classes by Mr. Marson, of the London Smallpox Hospital.

Cases of Smallpox, classified according to the Vaccination marks borne by each Patient.	Percentage of deaths in each class.	
	London Smallpox Hospital.	Birm. Smallpox Hospital.
Class		
1.—Said to have been Vaccinated, but having no cicatrix...	21.7	—
2.—Having one or two vaccine cicatrices	6.0	11.1
3.—Having three vaccine cicatrices	1.7	5.9
4.—Having four or more vaccine cicatrices	0.7	3.6
Unvaccinated	35.5	58.3

It is noticeable that the figures relating to our own Hospital bear out to a large extent those of the London Smallpox Hospital; the proportion of mortality in the Birmingham Hospital during the year was, however, considerably greater than that shown by Mr. Marson's figures. It is well, however, to state that only comparatively very few cases were treated in the Borough Hospital during the year, and consequently a death or two more or less would make a considerable difference in the percentages.

Influence of
Vaccination on
Smallpox
(Continued).

Not only, however, is the mortality greater in those who are imperfectly or not at all protected by vaccination than in those well vaccinated, but, when in such cases the disease does not end fatally, it is evidently more severe, as is proved by the average length of stay in the Hospital needed by each class of patients during the past year; for while those who had five vaccine marks had to be detained only 16 days, and those with four, three, and two marks 17, 19, and 20 days respectively, those who had only one mark visible had an average stay in the Hospital of 32 days, and those who were entirely unprotected by vaccination, of so long as 54 days, or nearly three and a half times as long as those who were really well vaccinated.

The prevalence or non-prevalence of Smallpox, as judged by the mortality in twenty of the largest English towns during the last four years, may be gathered from the Table below:—

DEATHS AND DEATH-RATE FROM SMALLPOX PER 100,000 OF THE
POPULATION IN 20 LARGE ENGLISH TOWNS.

Town.	Population.	Deaths from Smallpox in the year 1885.	Rate per 100,000				Twenty large towns compared
			1885.	1884.	1883.	1882.	
London ...	4,083,928	899	22.0	22.3	3.4	11.1	
Brighton ...	114,672	1	0.9	0.9	0.0	3.6	
Portsmouth ...	134,659	0	0.0	0.0	0.8	0.0	
Norwich ..	91,215	0	0.0	0.0	0.0	0.0	
Plymouth ...	76,045	0	0.0	0.0	0.0	0.0	
Bristol ...	218,169	10	4.6	0.0	0.0	0.0	
Wolverhampton ...	79,185	0	0.0	6.3	9.0	5.2	
Birmingham ...	427,769	12	2.8	14.9	26.5	4.2	
Leicester ...	136,147	0	0.0	0.0	0.0	0.0	
Nottingham ...	211,424	2	0.9	0.0	1.0	25.7	
Liverpool ...	579,724	46	7.9	18.1	4.6	1.1	
Manchester ...	337,342	33	9.8	1.5	0.3	4.7	
Salford ...	204,075	0	0.0	0.0	0.0	3.3	
Oldham ...	126,390	0	0.0	0.0	1.7	4.3	
Bradford ...	214,431	2	0.9	0.0	0.0	1.1	
Leeds ...	333,139	2	0.6	0.3	3.4	9.8	
Sheffield ...	305,716	8	2.6	11.1	0.7	1.4	
Hull ...	186,292	9	4.8	9.8	4.0	9.5	
Sunderland ...	125,327	17	13.6	67.8	41.3	0.9	
Newcastle-on-Tyne...	153,209	3	2.0	7.8	39.5	38.7	
In 20 Towns ...	8,138,858	1,044	12.8	15.2	5.2	8.2	

Cases and
Deaths in the
Borough from
1871.

The number of Cases and Deaths in the Borough in each quarter since 1871 has been as follows :—

DATE.				Cases.	Deaths.	
1871.				359	43	
November 11th to end of year ...				...	...	43
Total ...				359	—	43
1872.						
1st Quarter	...	...	...	798	96	
2nd "	...	...	...	632	92	
3rd "	...	...	...	355	67	
4th "	...	...	...	192	44	
Total ...				1,977	—	299
1873.						
1st Quarter	...	...	...	171	29	
2nd "	...	...	...	246	37	
3rd "	...	...	...	124	18	
4th "	...	...	...	253	38	
Total ..				794	—	122
1874.						
1st Quarter	...	...	...	757	123	
2nd "	...	...	...	1,303	196	
3rd "	...	...	...	1,059	165	
4th "	...	...	...	672	153	
Total ...				3,791	—	637
1875.						
1st Quarter	...	...	...	366	85	
2nd "	...	...	...	347	72	
3rd "	...	...	...	95	14	
4th "	...	...	...	16	2	
Total ...				824	—	173
1876.						
1st Quarter	...	...	...	2	0	
2nd "	...	...	...	2	0	
3rd "	...	...	...	2	0	
4th "	...	...	...	5	0	
Total ...				11	—	0
1877.						
1st Quarter	...	...	...	7	1	
2nd "	...	...	...	20	3	
3rd "	...	...	...	20	3	
4th "	...	...	...	3	1	
Total ...				50	—	8
1878.						
1st Quarter	...	...	...	3	0	
2nd "	...	...	...	4	0	
3rd "	...	...	...	10	2	
4th "	...	...	...	10	3	
Total ...				27	—	5
1879.						
1st Quarter	..	...	...	1	0	
2nd "	...	...	...	0	0	
3rd "	...	...	...	3	0	
4th "	...	...	...	0	0	
Total ...				4	—	0
1880.						
1st Quarter	...	...	...	2	0	
2nd "	...	...	...	5	1	
3rd "	...	...	...	8	1	
4th "	...	...	...	3	0	
Total ...				18	—	2

DATE.				Cases.	Deaths.	Cases and Deaths in the Borough from 1871
1881.						(Continued).
1st Quarter	...	...	...	5	5	
2nd "	...	...	...	9	1	
3rd "	...	...	...	2	0	
4th "	...	...	...	0	0	
Total				16	6	
1882.						
1st Quarter	...	...	...	0	0	
2nd "	...	...	...	43	6	
3rd "	...	...	...	33	9	
4th "	...	...	...	13	2	
Total				89	17	
1883.						
1st Quarter	...	...	...	48	7	
2nd "	...	...	...	152	9	
3rd "	...	...	...	567	54	
4th "	...	...	...	435	40	
Total				1,202	110	
1884.						
1st Quarter	...	...	...	384	54	
2nd "	...	...	...	64	8	
3rd "	...	...	...	13	1	
4th "	...	...	...	10	1	
Total				471	64	
1885.						
1st Quarter	...	...	...	69	12	
2nd "	...	...	...	4	0	
3rd "	...	...	...	9	0	
4th "	...	...	...	2	0	
Total				84	12	
Grand Total				9,717	1,498	

II.—PARASITIC, AND III.—DIETIC DISEASES.

The Deaths in these two classes are always few in number, and I have therefore amalgamated them here. Sixty-six Deaths were referred to them during the past year, against 64 in the previous year.

IV.—CONSTITUTIONAL DISEASES.

A slight reduction is observable in the mortality of this class, as compared with that of the previous year. The Deaths have numbered 1,252, and are equivalent to an annual Death-rate of 2·9 per 1,000 persons, against a rate of 3·0 in 1884. The number of Deaths from each disease in this class closely corresponds with that of the previous year, with the exception of that from Tabes Mesenterica, which has been decidedly fewer.

V.—DEVELOPMENTAL DISEASES.

Developmental
Diseases.

The number of Deaths in this class shows a great increase on that of the previous year; the extent of this increase is indicated by the Death-rate, which has risen from 1·3 in 1884, to 1·7 last year. Each of the four diseases in this group has occasioned a higher mortality than in the preceding year, but in none is it so marked as in "Old Age."

VI.—LOCAL DISEASES.

Local Diseases.

This class embraces a large number of diseases, and some which are always very destructive to life. It invariably occasions in consequence a heavier mortality than any of the other classes, last year's Deaths from all the diseases in this group amounting to 4,105, against 4,136 in 1884 and 4,274 in 1883; the latter figure gives a Death-rate of 10·3, that of 1884 one of 9·8, and last year's number a rate of 9·6. Inflammation of the Brain and Convulsions have had a diminished mortality when compared with the previous year; the numbers of Deaths from each of the other important diseases in this class are nearly identical for the last two years.

VII.—VIOLENT DEATHS.

Violent Deaths.

The Deaths in this class are somewhat fewer than in the previous year, namely 357, as compared with 371 in 1884.

VIII.—DEATHS FROM ILL-DEFINED AND NOT SPECIFIED CAUSES.

Deaths from ill-
defined and not
Specified Causes

Certain ill-definable or not easily classified diseases are grouped by themselves; they include, among others, Tumour, Abscess, Hæmorrhage, Debility, Inanition, and Marasmus. Upwards of 600 Deaths have been placed in this class during the year.

DISEASE MAP.

Disease Map.

A Map, indicating the locality of each Death from Scarlet Fever, Measles, and Typhoid Fever, is appended to the Report. A comparison of this with the Maps published in my previous Reports shows that the number of Deaths from these three diseases is lower than in any previous year, only 217, against

540 in 1884, and 626, the average number in the ten years preceding that one. On referring to this year's Map the most striking feature will be found to be the absolute immunity of an extensive area in the South-western portion of the Borough, viz., Edgbaston. Doubtless the freedom from these causes of death always observed here is mainly attributable to two factors—one, that at Edgbaston proper, owing to the station of life of nearly the whole of its inhabitants, the children do not congregate together in large numbers in Public Schools; and the other, that those who are attacked more frequently recover, owing to better treatment and nursing, than persons who are placed in less advantageous circumstances.

Disease Map
(Continued).

The absence of spots or crosses near the centre of the town is the natural result of the small number of persons actually living here, besides which the number of children, those who chiefly suffer from these diseases, bears a relatively smaller proportion to the whole population than in other portions of the Borough. A glance at the Map reveals the fact that the Eastern half is decidedly more thickly studded than the Western, and a further examination that this difference in the number of Deaths in these two divisions is the consequence of the far greater fatal prevalence of Measles in the Eastern than in the Western half, as already pointed out. In my last report I observed, "With regard to Measles, it will be found that if a line be drawn from North to South, cutting the Borough into nearly equal portions, a very great majority of the Deaths from this cause occurred on the Western side of this line, while the Eastern portion of the town nearly escaped its ravages."

It is thus seen that during the last two years this disease has gradually extended and carried its fatal effects into all parts of the Borough where large numbers of children belonging to the poorer classes are to be found.

The mortality from Scarlet Fever has been remarkably slight, hence the comparatively small number of Deaths recorded on the Map; its fatal influence, however, has been greatest in that portion of the town where Measles also proved most destructive to life. The Deaths from Typhoid Fever have been widely distributed over the Borough.

DEATHS REGISTERED IN THE BOROUGH OF BIRMINGHAM DURING THE
YEAR ENDING JANUARY 2ND, 1886.

1885	AGES.						REGISTRATION SUB-DISTRICTS.								Borough.
	0-1	1-5	5-20	20-40	40-60	60 and up.	Ladywood.	St. Thomas.	St. Martin.	St. George.	All Saints.	Deritend.	Duddeston.	Edgbaston.	
ALL CAUSES	2253	1155	477	1053	1510	1708	967	776	809	1449	1441	1396	1045	273	8156
I.—Specific Febrile, or Zymotic Diseases.															
1.—MIASMATIC DISEASES.															
Smallpox	2	..	5	4	1	..	..	..	..	..	12	..	..	..	12
Measles	28	87	4	..	..	..	3	11	12	11	4	45	33	..	119
Scarlet Fever	1	23	7	..	..	..	5	..	5	3	9	5	2	2	31
Typhus Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	92	153	8	..	..	..	36	22	27	47	40	47	32	2	253
Diphtheria	2	24	19	1	..	..	4	5	6	6	8	14	..	3	46
Simple, Continued, or Ill-defined Fever .. .. .	..	5	3	1	..	1	2	3	..	2	..	..	2	1	10
Enteric or Typhoid Fever .. .. .	..	4	23	30	5	5	15	6	10	6	10	11	7	2	67
Other Miasmatic Diseases .. .. .	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1
2.—DIARRHŒAL DISEASES.															
Simple Cholera .. .. .	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1
Diarrhœa, Dysentery	264	48	4	3	5	13	39	37	32	66	23	83	50	7	337
3.—MALARIAL DISEASES.															
Remittent Fever .. .. .	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1
Ague .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4.—ZOOGENOUS DISEASES.															
Cowpox and effects of Vaccination .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases (<i>e.g.</i> , Hydrophobia, Glanders, Splenic Fever) .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5.—VENEREAL DISEASES.															
Syphilis	36	9	..	2	..	1	2	3	7	15	9	7	5	..	48
Gonorrhœa, Stricture of Urethra	1	1	..	4	5	..	..	2	..	6	..	1	2	..	11
6.—SEPTIC DISEASES.															
Erysipelas	7	1	1	2	7	4	..	2	..	5	6	6	2	1	22
Pyæmia, Septicæmia	1	..	5	9	3	1	1	3	..	4	3	5	3	..	19
Puerperal Fever .. .. .	..	..	..	5	..	..	..	..	..	3	..	1	1	..	5
II.—Parasitic Diseases.															
Thrush, and other Vegetable Parasitic Diseases	5	1	..	..	..	..	1	..	..	2	1	1	1	..	6
Worms, Hydatids, and other Animal Parasitic Diseases .. .. .	..	..	1	1	1	..	..	1	..	2	..	..	..	..	3
III.—Dietic Diseases.															
Want of Breast Milk, Starvation	35	2	..	..	..	3	7	1	..	5	19	6	1	1	40
Scurvy	2	..	..	..	..	..	..	1	..	..	..	..	1	..	2
Chronic Alcoholism .. .. .	..	..	..	2	10	..	2	3	1	1	2	1	1	1	12
Delirium Tremens .. .. .	..	..	..	1	1	1	1	1	..	..	..	..	1	..	3
IV.—Constitutional Diseases.															
Rheumatic Fever, Rheumatism of the Heart .. .. .	..	1	6	7	5	1	3	6	..	7	1	..	1	2	20
Rheumatism .. .. .	..	1	8	7	12	4	8	6	2	1	3	8	4	..	32
Gout .. .. .	..	..	..	..	9	2	2	1	..	5	2	..	1	..	11
Rickets	6	10	..	..	..	..	3	2	2	3	2	..	4	..	16
Cancer, Malignant Disease .. .. .	..	1	1	20	122	81	23	27	24	34	39	36	20	17	225
Tabes Mesenterica	36	18	2	2	1	..	1	8	8	13	11	5	10	3	59
Tubercular Meningitis, Hydrocephalus.. .. .	27	40	7	4	..	..	15	5	10	13	3	15	10	7	73
Phthisis	5	9	61	335	261	66	79	54	65	127	205	105	79	23	737
Other forms of Tuberculosis, Scrofula	7	8	12	4	5	..	10	3	5	9	3	4	2	..	36

DEATHS REGISTERED IN THE BOROUGH OF BIRMINGHAM DURING THE
YEAR ENDING JANUARY 2ND, 1886—continued.

1885.	AGES.						REGISTRATION SUB-DISTRICTS.								Borough.
	0-1	1-5	5-20	20-40	40-60	60 and up.	Ladywood.	St. Thomas.	St. Martin.	St. George.	All Saints.	Deritend.	Duddeston.	Edgbaston.	
IV.—Constitutional Dis.—continued.															
Purpura, Hæmorrhagic Diathesis ..	2	1	3	2	2	..	2	..	2	..	3	2	1	..	8
Anæmia, Chlorosis, Leucocythæmia ..	..	..	1	3	4	4	..	3	2	3	2	3	1	..	14
Glycosuria, Diabetes Mellitus ..	..	1	3	5	5	2	..	2	..	4	3	1	3	..	15
Other Constitutional Diseases ..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	1
V.—Developmental Diseases.															
Premature Birth	205	..	..	..	..	..	27	11	25	37	23	44	34	4	205
Atelectasis	41	..	..	..	..	..	2	..	2	9	3	12	12	1	41
Congenital Malformations ..	38	2	1	1	..	..	5	..	4	7	8	6	10	2	42
Old Age .. ..	..	..	..	..	1	440	28	31	38	55	163	46	55	25	441
VI.—Local Diseases.															
1.—DISEASES OF NERVOUS SYSTEM.															
Inflammation of Brain or Membranes ..	45	70	25	15	12	10	23	12	15	34	32	30	27	4	177
Apoplexy, Softening of Brain, Hemiplegia, Brain Paralysis ..	3	..	2	22	126	172	28	30	29	59	70	55	36	18	325
Insanity, General Paralysis of the Insane ..	3	..	1	..	3	2	..	1	3	2	..	..	..	..	6
Epilepsy	3	..	7	13	4	7	1	1	1	8	15	6	2	..	34
Convulsions	156	46	4	1	..	1	26	16	31	34	24	35	39	3	208
Laryngismus Stridulus (Spasm of Glottis) ..	11	3	..	1	..	..	3	2	2	5	..	..	3	..	15
Disease of Spinal Cord, Paraplegia, Paralysis Agitans .. ..	..	..	2	10	5	8	3	4	2	2	8	3	2	1	25
Other Diseases of Nervous System ..	9	9	8	14	12	6	7	12	3	6	5	14	10	1	58
2.—DISEASES OF ORGANS OF SPECIAL SENSE. (e.g., of Ear, Eye, and Nose).															
3.—DISEASES OF CIRCULATORY SYSTEM.	3	..	..	2	1	2	1	..	..	2	2	2	..	1	8
Pericarditis .. ..	..	..	..	1	2	..	1	..	2	..	..	..	..	..	3
Acute Endocarditis .. ..	..	..	5	2	3	..	1	2	..	3	2	2	..	..	10
Valvular Diseases of Heart .. ..	..	1	18	18	20	15	14	12	6	24	4	8	2	2	72
Other Diseases of Heart	2	9	45	78	167	170	51	58	39	62	98	85	57	21	471
Aneurism .. ..	..	..	2	8	2	..	2	..	4	6	..	..	..	..	12
Embolism, Thrombosis .. ..	..	1	..	1	1	3	1	..	1	..	1	..	2	1	6
Other Diseases of Blood Vessels ..	..	..	2	3	1	..	..	..	2	2	..	2	..	..	6
4.—DISEASES OF RESPIRATORY SYSTEM.															
Laryngitis	2	12	5	2	2	..	5	5	3	2	4	2	1	1	23
Croup	15	42	13	..	..	..	2	1	14	7	11	22	12	1	70
Emphysema, Asthma	1	..	3	7	7	4	2	1	3	1	..	..	4	3	18
Bronchitis	307	206	12	40	262	361	160	81	143	235	163	236	143	22	1188
Pneumonia	94	108	28	91	103	66	58	48	44	68	100	96	60	16	490
Pleurisy .. ..	..	3	1	9	6	7	2	4	3	5	5	1	6	..	26
Other Diseases of Respiratory System ..	32	27	2	5	19	12	15	9	16	20	4	16	16	1	97
5.—DISEASES OF DIGESTIVE SYSTEM.															
Dentition	36	24	..	..	..	..	9	4	8	18	7	5	6	3	60
Sore Throat, Quinsy .. ..	..	3	..	..	..	1	..	1	2	..	1	..	..	..	4
Diseases of Stomach	16	2	2	4	9	15	9	4	8	8	6	5	4	4	48
Enteritis	14	1	2	4	2	4	5	3	1	4	4	9	1	..	27
Obstructive Diseases of Intestines ..	7	2	3	10	18	14	4	14	2	11	7	7	6	3	54
Peritonitis	5	..	12	15	4	6	7	3	3	5	6	8	5	5	42
Ascites	2	..	..	..	2	3	1	2	2	1	..	..	..	1	7
Cirrhosis of Liver .. ..	..	..	..	11	34	20	9	2	11	17	11	9	2	4	65
Jaundice, and other Diseases of Liver ..	11	1	4	8	26	24	16	6	5	9	8	13	7	10	74
Other Diseases of Digestive System ..	9	1	5	4	3	6	4	4	..	9	3	3	2	3	28
6.—DISEASES OF LYMPHATIC SYSTEM (e.g., of Lymphatics and Spleen).															
7.—DISEASES OF GLAND-LIKE ORGANS OF UNCERTAIN USE (e.g., Bronchocele, Addison's Disease).	..	..	1	..	1	..	..	..	..	1	..	1	..	..	2
..	..	..	6	3	..	..	1	2	3	1	..	1	1	..	9

DEATHS REGISTERED IN THE BOROUGH OF BIRMINGHAM DURING THE
YEAR ENDING JANUARY 2ND, 1886—continued.

1885.	AGES.						REGISTRATION SUB-DISTRICTS.								Borough.
	0-1	1-5	5-20	20-40	40-60	60 and up.	Ladywood.	St. Thomas.	St. Martin.	St. George.	All Saints.	Deritend.	Duddleston.	Edgbaston.	
Local Diseases—continued.															
8.—DISEASES OF URINARY SYSTEM.															
Nephritis	1	5	1	6	10	4	3	1	3	8	1	6	5	..	27
Bright's Disease, Albuminuria	1	3	7	20	35	26	7	13	6	19	17	12	14	4	92
Disease of Bladder or of Prostate ..	..	..	..	4	5	12	2	3	..	6	2	1	4	3	21
Other Diseases of the Urinary System ..	2	2	4	11	10	14	7	4	2	10	7	4	5	4	43
9.—DISEASES OF REPRODUCTIVE SYSTEM.															
(A) Of Organs of Generation.															
Male Organs .. .. .	..	..	..	2	3	..	3	1	..	..	1	..	..	..	5
Female Organs .. .. .	..	..	..	11	2	..	4	2	..	7	..	..	..	..	13
(B) Of Parturition.															
Abortion, Miscarriage .. .. .	..	..	..	9	1	..	1	2	1	2	1	1	2	..	10
Puerperal Convulsions .. .. .	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1
Placenta Prævia, Flooding .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Accidents of Child-birth .. ..	..	..	2	49	4	..	6	3	2	5	16	16	6	1	55
10.—DISEASES OF BONES AND JOINTS.															
Caries, Necrosis .. .. .	..	..	3	9	1	2	..	3	1	3	6	..	1	1	15
Arthritis, Ostitis, Periostitis .. ..	..	..	3	1	..	..	1	1	..	..	..	1	1	..	4
Other Diseases of Bones and Joints ..	2	1	5	2	6	3	3	..	2	5	2	4	2	1	19
11.—DISEASES OF INTEGUMENTARY SYSTEM.															
Carbuncle, Phlegmon	1	2	..	..	3	3	1	..	2	4	2	..	..	..	9
Other Diseases of Integumentary System	5	3	..	3	4	8	4	3	1	4	6	2	3	..	23
VII.—Deaths from Violence.															
1.—ACCIDENT OR NEGLIGENCE.															
Fractures and Contusions	1	7	14	14	19	20	3	27	3	22	8	4	7	1	75
Gunshot Wounds .. .. .	..	..	..	..	1	..	..	1	..	..	..	..	..	..	1
Cut, Stab .. .. .	..	..	..	..	1	..	..	..	..	1	..	..	..	..	1
Burn, Scald	5	31	9	9	5	3	1	21	..	37	2	1	..	..	62
Poison	1	1	..	4	1	..	1	..	1	1	1	1	2	..	7
Drowning .. .. .	..	1	20	3	1	1	3	1	1	4	7	5	5	..	26
Suffocation	121	6	..	..	4	..	10	15	20	24	9	25	25	3	131
Otherwise	2	2	2	5	8	4	2	9	..	6	2	1	2	1	23
2.—HOMICIDE.															
Manslaughter .. .. .	..	..	..	3	1	..	1	..	..	3	..	..	..	..	4
Murder	1	..	..	2	..	..	..	1	1	1	..	..	..	..	3
3.—SUICIDE.															
Gunshot Wounds .. .. .	..	..	..	1	..	..	..	1	..	..	..	..	..	..	1
Cut, Stab .. .. .	..	..	..	2	4	3	1	1	1	3	..	1	2	..	9
Poison .. .. .	..	..	..	2	2	..	..	..	..	3	1	..	..	..	4
Drowning .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hanging .. .. .	..	..	..	4	3	1	1	..	4	2	..	..	1	..	8
Otherwise .. .. .	..	..	1	..	..	..	..	..	..	1	..	..	..	..	1
4.—EXECUTION.															
Hanging .. .. .	..	..	..	1	..	..	..	..	..	1	..	..	..	..	1
VIII.—Deaths from Ill-Defined and not Specified Causes.															
Dropsy	1	5	..	2	5	6	1	1	3	1	5	4	3	1	19
Debility, Atrophy, Inanition	234	4	..	..	..	6	37	18	13	27	54	43	43	9	244
Marasmus	231	51	3	..	..	..	37	29	41	44	29	48	55	2	285
Mortification	1	1	..	2	3	5	2	2	1	1	1	2	1	2	12
Tumour .. .. .	..	..	4	11	20	7	15	5	2	6	2	8	1	3	42
Abscess	5	1	4	4	3	2	2	2	..	5	5	3	1	1	19
Hæmorrhage	1	..	..	1	3	..	2	..	..	..	..	2	1	..	5
Sudden Death (cause not ascertained) ..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1
Other not Specified or Ill-defined Causes	11	6	3	6	8	3	3	..	3	1	22	3	4	1	37

METEOROLOGY.

The year 1885 differed widely as regards weather from its predecessor, which was the warmest year since 1872, and had a mean temperature of $49^{\circ}6$, whereas in 1885 the average temperature was only $47^{\circ}4$, or $2^{\circ}2$ less than in 1884, and $0^{\circ}8$ less than the average of the 20 years 1861–1880 inclusive; it was the coldest year since 1891, which had a temperature of $47^{\circ}2$; and, if we except 1881 and 1879, two very cold years, it was colder than any year since 1867. In spite of the low temperature of the year the early summer was warm and fine, the weather both in June and July being rather warmer than is usually experienced in those months.

The first month of the year had a temperature slightly below the average; this is the only January since 1881 which has been colder than the average for that month, which is usually the coldest of the year; the minimum temperature observed was, however, no lower than 24° or only 8° of frost. Two remarkably dark days occurred, the sky being hidden by dense masses of fog, cloud, and smoke; so black, indeed, was it that the light was never once equal to that of an ordinary twilight, whilst for 14 consecutive days in this month the sun was never once visible. The mean temperature of February was $42^{\circ}2$ or $3^{\circ}1$ in excess of the average and $6^{\circ}3$ higher than in January. A lower minimum temperature than that of any day in January was recorded on the night of the 19th, when a temperature of $22^{\circ}5$ or $9^{\circ}5$ of frost was registered. On eleven days a maximum temperature of 50° and upwards was observed. March was rather cold owing to the prevalence during a large portion of it of easterly winds. Thus, instead of being $1^{\circ}5$ warmer than February, it was 2° colder. As in the preceding year April was cold, the prevailing winds being from the east and north, whilst some very severe frosts occurred in the early part of the month, the temperature falling in the screen 5° below freezing point on the night of the 4th. Although April was below the average in temperature, I recorded the highest temperature I have ever observed in this month, on the 19th and 21st, when the thermometer attained the very high figure of 71° . May proved a very cold month, the highest maximum temperature observed being only 68° , or 3° lower than that attained in April. June was the only month in the second quarter of 1885 which was warmer than the average, though the excess was very small, amounting to only one-tenth of a degree. During the first week we were visited by a heat wave, which culminated on the 5th in the highest temperature I have ever observed so early in the year, the thermometer on that day recording a maximum of 82° . There were seven days during the month which had a maximum temperature above 70° , as compared with six last year, three in 1883, and none in 1882. July was a lovely month, being warm and very dry, containing no fewer

Meteorology
(Continued).

August

September.

October.

November.
December.

than 18 days with a maximum temperature above 70°, as against 15 in 1884 and 6 in 1883. The absolute highest temperature of the whole year occurred on the 25th, when I registered the high temperature of 86°. High as this is, there are two instances in my records of still higher readings, namely, 88 in July, 1881, and 89 in August, 1884. The summer and July departed together, for August was miserably cold, being 3°·6 below the average, and 7°·2 lower than the average temperature of the previous August. September also was cold, but happily it was drier than usual, a circumstance which, fortunately, enabled the farmers of the Midlands to gather in their corn crops free from any serious damage from atmospheric conditions. Some very unseasonable weather occurred in the latter part of this month, a sharp frost being experienced in exposed places on the night of the 27th, whilst on the 25th there was a slight fall of sleet. The cool weather experienced in August and September was not without its advantages, as its effect was to diminish to a large extent the usually high mortality from infantile diarrhoea. To sum up briefly the three remaining months, October was very cold, being 3°·3 below the average, and, with the exception of 1880, the coldest October in my records, which date back to 1865. A cold October is usually followed by a cold January, and the truth of this statement has been once more proved this year. The temperature of November was slightly above, and that of December exactly identical with the average. A period of extreme cold occurred between the 6th and 13th of December—a minimum as low as 22°, or 10° of frost, being registered on the 7th. During the year 1885 there were only four months with a mean temperature in excess of the average; seven months were cold, and in one month the mean temperature did not differ from the average.

Rainfall.

In this town the average annual rainfall amounts to 31·93 inches; in the year 1885 the total fall was 30·43 inches, or exactly one inch and a half below the average. This is the second year in succession that the rainfall has been less than the average, though up to last year there were only three years since 1873 with a rainfall below the mean. The previous year was considerably the driest in my records, which extend back, as regards rainfall, to the year 1860. January was a dry month; February, as is usually the case when warm, was extremely wet, rain falling on 16 days. March was, as regards rainfall, a disagreeable month, for, whilst the total fall was very considerably below the mean, there were no fewer than 11 rainy days, the daily falls being very small, the largest being 0·28 inch on the 2nd, whilst on seven days less than one-tenth of an inch fell. April, May, and June were all very wet months, very large falls occurring on the 1st of April, and the 6th, 8th, and 23rd of June, when 0·90 inch, 0·95 inch, 1·01 inches, and 0·88 inch were measured respectively. With July came an extremely dry period,

the rainfall during this month amounting to only 0·51 inch, or about one-fifth of the usual quantity. This was considerably less than in any recent year, and, I believe, it was the driest July on record in the Midlands. Rain fell on four days only, the first fall being on the 6th, when less than a tenth of an inch was measured; then followed 11 days without rain, slight showers falling on the 17th and 18th, two days afterwards 0·29 inch fell, and then the remainder of the month passed without any addition to the rainfall. August was wet, a heavy fall of rain occurring on the 27th, when 1·08 inches fell. September was dry, whilst October was exceptionally wet, 1·06 inches falling on the 23rd, and the total fall being 1·28 inches in excess of the average. November was also wet, but with December came an exceptionally dry period, the total fall for this month being as low as 0·65 inch. With the exception of a slight drizzle on the 18th, no rain fell between the 5th and 28th of this month, which is generally one of the wettest in the year; in 1885 there was only one month, July, which had a less rainfall, and my records contain no other instance of a December with so small a fall.

The following table shows the temperature and rainfall for each month of 1885, as well as the variations from the monthly averages. I am indebted to the late Mr. Plant for the temperature averages for the twenty years, 1861-1880:—

MONTHS.	TEMPERATURE.			RAINFALL.		
	Mean Temperature in Degrees and Parts.	Average for 20 years, 1861-1880 inclusive	Above or below the average.	Rainfall for Month in Inches and Parts.	Average for 10 years 1867-1876 inclusive.	Above or below the average in Inches and Parts.
January	35°·9	36°·6	— 0°·7	1·98	2·92	— 0·94
February	42·2	39·1	+ 3·1	3·40	2·26	+ 1·14
March	40·2	40·6	— 0·4	1·02	2·47	— 1·45
April	45·8	47·2	— 1·4	2·99	2·01	+ 0·98
May	48·3	51·9	— 3·6	2·60	2·27	+ 0·33
June	58·5	58·4	+ 0·1	3·97	2·28	+ 1·69
July	62·3	61·6	+ 0·7	0·51	2·88	— 2·37
August	56·9	60·5	— 3·6	3·31	2·54	+ 0·77
September	54·5	55·4	— 0·9	1·94	3·67	— 1·73
October	44·9	48·2	— 3·3	4·61	3·33	+ 1·28
November	41·1	40·3	+ 0·8	3·46	2·09	+ 1·37
December	37·9	37·9	...	0·65	3·21	— 2·56
Year... ..	47·4	48·2	— 0·8	30·44	31·93	— 1·49

METEOROLOGY, BIRTHS, DEATHS, AND MORTALITY FROM CERTAIN
PREVALENT DISEASES FOR EACH WEEK OF 1885.

Week.		Temperature of the Air.			Air Pressure.				Deaths at the Ages.			Deaths from										
	Date of Ending.	Highest during week.	Lowest during week.	Mean Temperature.	Extreme Range of Barometric Changes.	Horizontal Movement of Air in Miles.	Mean Humidity, complete Saturation = 100.	Rainfall in inches.	Births.	All Ages.	Under 1 year.	1 to 5 years.	Over 60.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Who'ping Cough.	Fever.	Diarrhoea.	Phthisis.	Respiratory Diseases.
Number.																						
1885.																						
1	Jan. 10	48°0	30°0	37°5	.959	897	92°0	77	289	194	42	31	55	...	3	1	8	3	3	17	5	5
2	" 17	50°5	27°5	34°6	1·243	2198	93°0	11	271	221	44	38	54	1	1	3	112	3	1	11	65	65
3	" 24	37°5	24°0	31°0	.270	878	98°0	02	283	213	35	35	55	1	1	...	112	4	3	18	70	70
4	" 31	51°5	30°0	42°6	1·183	1092	93°1	08	278	194	55	33	38	...	...	114	1	3	13	51	51	51
5	Feb. 7	50°5	33°0	41°3	.614	1258	89°1	28	307	194	45	29	43	3	...	2	3	8	1	...	15	51
6	" 14	54°0	36°0	44°8	.468	1225	93°0	26	301	162	35	26	37	3	1	...	110	2	2	12	39	39
7	" 21	50°0	22°5	36°4	.838	794	95°1	09	288	169	41	30	34	...	...	214	1	2	25	35	35	35
8	" 28	59°5	29°0	45°5	.265	1195	97°0	37	318	156	44	25	32	2	2	1	110	1	3	12	34	34
9	Mar. 7	54°0	29°0	38°7	.800	1283	89°0	49	297	145	49	25	23	1	1	1	110	1	3	6	28	28
10	" 14	49°5	29°5	38°8	.738	953	89°0	05	318	155	38	34	24	...	1	1	...	8	2	3	16	33
11	" 21	55°5	28°5	42°3	.908	1305	92°0	18	268	196	47	27	51	...	...	...	5	2	2	23	47	47
12	" 28	48°0	29°0	39°8	.455	1150	86°0	09	303	157	45	24	35	...	...	...	112	...	...	118	35	35
13	April 4	52°5	27°5	41°3	.575	930	94°1	10	255	164	46	21	36	1	2	...	7	...	...	2	12	39
1886.																						
14	" 11	54°0	27°0	41°3	.527	1541	86°0	44	274	211	62	26	55	...	1	1	3	6	1	7	14	59
15	" 18	60°0	33°0	41°7	.418	919	88°0	77	274	195	48	23	45	...	1	1	...	6	1	...	19	50
16	" 25	71°0	41°0	53°9	1·109	1020	76°0	72	256	153	39	27	25	...	4	1	...	5	...	5	13	33
17	May 2	63°5	38°0	50°5	.380	850	73°0	19	283	175	62	23	24	...	1	...	1	7	1	...	17	56
18	" 9	59°5	34°5	43°9	.497	860	81°0	89	281	159	48	20	26	...	1	...	...	6	...	2	12	35
19	" 16	56°0	34°0	46°6	.369	1080	64°0	40	292	146	42	18	25	...	1	...	...	5	...	...	11	33
20	" 23	57°0	35°5	47°5	.659	1075	77°0	93	286	165	44	19	42	...	2	1	...	5	1	4	15	43
21	" 30	68°0	40°0	54°0	.190	955	75°0	35	229	168	41	28	40	...	1	1	...	7	...	1	16	46
22	June 6	82°0	45°0	60°7	.501	920	61°1	16	304	183	40	20	39	...	1	1	7	...	...	5	21	39
23	" 13	75°5	41°5	57°7	.588	700	70°1	25	274	139	39	19	28	...	1	1	3	...	...	2	10	30
24	" 20	75°5	48°5	59°3	.542	830	71°0	30	281	162	42	26	31	...	4	...	...	5	2	4	13	34
25	" 27	69°0	41°0	55°7	.428	1117	82°1	20	250	135	25	21	25	...	3	...	1	2	...	3	14	23
26	July 4	74°5	43°0	59°4	.242	623	71°0	06	244	102	24	21	20	...	3	...	...	3	1	3	10	15
1887.																						
27	" 11	78°0	47°0	62°6	.249	885	71°0	08	251	137	40	21	26	...	2	...	...	2	2	3	18	21
28	" 18	75°5	45°0	58°7	.357	825	72°0	02	305	121	27	19	25	...	2	...	...	3	...	3	14	17
29	" 25	80°0	55°0	65°1	.652	610	69°0	41	269	135	44	23	21	...	6	2	1	4	...	11	23	23
30	Aug. 1	86°0	48°5	63°8	.185	760	73°0	00	264	143	50	15	17	...	3	...	1	4	1	16	15	22
31	" 8	68°5	46°5	56°4	.349	592	84°1	53	263	145	62	20	20	...	2	...	...	4	2	27	13	18
32	" 15	71°0	43°0	58°0	.772	1115	66°0	23	319	190	78	22	33	...	3	3	...	2	...	40	16	16
33	" 22	76°0	42°0	58°3	.388	704	76°0	27	274	169	67	24	24	...	5	...	1	4	1	32	12	17
34	" 29	72°0	45°0	55°9	.132	604	82°1	28	250	147	54	20	25	...	5	1	4	2	2	23	13	13
35	Sept. 5	70°0	42°0	55°2	.583	785	77°0	70	313	145	55	18	30	...	1	2	...	2	...	35	11	12
36	" 12	68°0	46°0	56°4	.233	990	80°0	46	247	129	40	14	29	...	1	1	3	2	1	13	9	15
37	" 19	74°5	46°5	57°3	.242	815	76°0	41	255	104	37	10	9	...	1	...	1	...	1	10	9	14
38	" 26	70°0	36°0	52°5	.371	1013	80°0	01	260	127	35	15	27	...	2	...	2	2	2	10	19	9
39	Oct. 3	58°0	34°5	48°2	.480	1041	74°0	86	280	136	45	14	26	...	...	1	1	...	2	8	13	24
1888.																						
40	" 10	58°0	38°0	46°5	.614	1202	82°1	37	239	128	38	13	33	...	1	...	...	2	1	3	9	15
41	" 17	57°0	32°0	44°2	.456	1488	87°0	57	265	136	35	13	32	...	1	...	...	2	4	4	16	26
42	" 24	54°0	36°5	43°6	.887	696	90°1	11	276	128	32	22	31	...	2	...	3	1	...	4	9	29
43	" 31	55°0	33°0	43°2	.919	1457	85°1	06	286	114	29	10	27	...	1	...	1	1	2	5	6	27
44	Nov. 7	56°0	32°5	43°7	.738	1185	92°1	19	266	134	34	19	28	...	3	...	3	...	...	2	10	25
45	" 14	51°0	37°0	42°3	.639	598	95°0	44	306	145	44	19	32	...	1	2	...	3	1	...	10	35
46	" 21	44°0	24°0	34°9	.711	944	94°0	00	272	140	38	13	38	...	1	...	2	2	4	5	13	38
47	" 28	53°0	34°0	41°7	.609	1118	97°1	06	245	174	54	24	37	...	3	...	1	...	2	5	17	47
48	Dec. 5	56°0	35°0	43°4	.646	1250	95°0	89	300	136	30	15	35	...	2	1	...	2	3	...	10	35
49	" 12	40°0	22°0	30°1	.945	906	98°0	00	264	161	45	20	37	...	2	...	1	4	5	1	18	29
50	" 19	51°5	35°0	42°0	.263	766	96°0	02	279	182	33	31	51	...	11	2	...	3	10	115	38	
51	" 26	47°0	28°0	39°0	.491	723	95°0	00	193	141	33	24	31	...	14	1	1	...	1	2	15	26
1889.																						
52	Jan. 2	50°0	27°0	41°1	.500	1166	89°0	39	338	196	52	28	42	...	8	1	3	3	2	6	16	38

II. SANITATION.

i. *Influences affecting or threatening to affect the Public Health.* The extensive demolitions of dilapidated and essentially insanitary property which have been effected during the past ten years in connection with the Improvement Scheme, the extension of New Street Station, and the construction of the connecting railway between New Street and Granville Street, practically came to an end in 1884, so that very little building property has been removed during the past year. There can be no doubt, however, that the removal of so much property unfit for human habitation, has exercised a very beneficial effect on the health of the town.

Removal of
Insanitary
Property.

A few midden privies which have been found in very unsuitable positions, or to have been ill-constructed, have been re-erected on a better system, but the number of them so converted during the past year has been smaller than in any recent year.

Ashpit middens.

Steps continue to be taken by the police to prevent the deposition on the thoroughfares of all kinds of filth from houses.

Surface filth.

Fifteen summonses were taken out during the year for offences of this description, and eleven of the defendants were mulcted in small fines; three others were let off with a caution. I trust that the measures which have of late years been taken to bring the offenders to justice will result in a permanent improvement in the condition of some of our streets, which have certainly in the past been very offensive both to sight and smell, and more or less inimical to the health, not only of those who are compelled to spend most of their time in close proximity to them, but also of those who have to traverse them. The Assistant Inspectors have also frequently to call the attention of householders to the filthy state of the courts and privies, and occasionally to take magisterial proceedings before they can secure proper cleanliness.

The keeping of fowls and other animals in improper situations, sometimes in cellars, is another influence which injuriously affects the public health. Efforts have been put forth for many years to curtail as far as possible so harmful a practice, but I am sorry to say with only partial success.

Improper
keeping of
animals.

Offences created by the emission of dense smoke have been apparently fewer than in the previous year, only 87 summonses having been issued, against 142 in 1884, while it has been found necessary to send a letter of caution to the manufacturer in 144 instances, against 153 in the preceding year.

Smoke.

Certification of
causes of death.

Inquests.

Uncertified
deaths.

Of the 8,156 deaths recorded by the Local Registrars during the year, 7,281 were returned on medical certificates, and 698 on the certificate of the Coroner or of his Deputy, whilst 177 were registered on the information of the nearest relative.

It is unsatisfactory to find that the proportion of uncertified deaths shows a further rise on that observed in 1884; the greatest increase has taken place in the Registration Sub-District of Saint George, where 3·4 per cent. of the deaths were neither certified by a medical man nor after an enquiry by the Coroner.

Particulars of the Certification of the causes of death in the whole Borough and in each Registration Sub-District are furnished in the following statement:—

Registration Sub-Districts.	Total Deaths.	Certified by			Proportion per cent. of Deaths.		
		Registered Medical Practitioners.	Coroner.	Not Certified.	Certified by		
					Registered Medical Practitioners.	Coroner.	Not Certified.
Borough of Birmingham.	8,156	7,281	698	177	89·2	8·6	2·2
Ladywood ...	967	875	68	24	90·5	7·0	2·5
St. Thomas ...	776	640	116	20	82·5	15·0	2·5
St. Martin ...	809	715	78	16	88·4	9·6	2·0
St. George ...	1,449	1,205	195	49	83·1	13·5	3·4
All Saints ...	1,441	1,358	62	21	94·2	4·3	1·5
Deritend ...	1,396	1,285	88	23	92·0	6·3	1·7
Duddeston ...	1,045	948	81	16	90·7	7·8	1·5
Edgbaston ...	273	255	10	8	93·4	3·7	2·9

Causes, origin,
and distribution
of Disease.

ii. *The Causes, Origin, and Distribution of Disease.*—

Remarkably few cases of disease of a zymotic nature have come under the cognisance of the Department during the year, and consequently the amount of time and labour that has been needed for investigations into the origin and prevention of these diseases has been decidedly less than in previous years. When, however, information has reached us of the existence of such cases, steps have been promptly taken to find, if possible, the source of the illness, attention being directed, among other things, to the condition of the drains, closets, and water supply. I need hardly say that where defects are found measures are at once taken to ensure their speedy removal. Where the disease proved to be either Smallpox or Scarlet Fever immediate removal to the Borough Hospital was strongly advised and urged, and, fortunately, in most cases secured; the clothing and bedding used by the patient were disinfected, the wall-papers stripped and burnt, the wood-work cleansed, and the walls limewashed. Where

cases of Diphtheria or Typhoid Fever have come to my knowledge, a visit to the premises has been made by myself, as well as by the Ward Inspector. In order to prevent, as far as possible, the spread of disease, cautions have also been given to neighbours who thoughtlessly visit at infected houses, and to schoolmasters and employers of labour, that the attendance at schools or factories of members of households in which infectious disease is present must be discontinued until a certificate has been received from the Medical Attendant stating that all danger of infection has passed. Such trades as tailoring, mangling, pawnbroking, and milk-selling, are always suspended whenever there is reason to believe that infection may be carried by their means.

Schools and
Infectious
Diseases.

Trades and
Infectious
Diseases

During the year the following circular was issued to the medical profession of the town :—

Notification of
Infectious
Diseases.

“HEALTH DEPARTMENT,

“THE COUNCIL HOUSE,

“February, 1885.

“DEAR SIR,

“We beg to inform you that the Health Committee have had under consideration the question of fees for the notification of cases of Smallpox and Scarlet Fever, and that they have decided upon the following scale to take effect after the 31st of March next :—

1. For the notification of cases where the patient is *not* removed to the Borough Hospital, 2/6.
2. For the notification of cases where the patient *is* removed to the Borough Hospital, 5/-.
3. For the notification of the existence of either of the diseases where more than one member of a household is affected at the same time, only a single fee will be paid, *unless the Patients are removed to the Borough Hospital* ; the fee of 5/- will be paid for each person so removed.

“The Health Committee beg to impress upon you the importance of notification as early as possible, without which, it is impossible for them to cope with outbreaks of preventable disease, and they rely upon you to give them, to the utmost of your power, the benefit of your valuable assistance.

“We remain, dear Sir,

“Yours faithfully,

“WILLIAM COOK,

“Chairman of the Health Committee.

“ALFRED HILL, M.D.,

“Medical Officer of Health.”

Advice to the
Sanitary
Authority.

iii. *Advice to the Sanitary Authority on Matters affecting the Public Health.*—

Nuisance from
sewer in
Duchess Road.

My advice has been given on several matters of importance during the year, among these being an outbreak of Scarlet Fever at the Deaf and Dumb Institution; the condition of the water taken from Plant's Brook, Sutton, for the Corporation supply, before and after the stoppage of certain drainage from discharging into it; and the deodorization of urinals. In October last, owing to the receipt of letters from several residents in Duchess Road, in which they complained of the condition of the sewer in that road, I reported that I had visited and examined the openings of the sewer in company of Mr. Parker, the Inspector of Nuisances. The gullies at the side of the road were not offensive, but the ventilators in the crown of the sewer situated in the middle of the road were decidedly so.

“Without a knowledge of the fall, and other features of the sewer, it is impossible for me to competently suggest a remedy for the nuisance, it is rather a matter for the Borough Surveyor to deal with.”

“I am informed, however, that the gradient is a slow one, and that the upper end of the sewer is a dead one; should it be found that, instead of running off at once, the contents are retained, so as to decompose and evolve offensive emanations, the evil might be most effectually removed by a periodical flushing by means of an automatic cistern, discharging periodically with a sufficient head of water.”

Outbreaks of
Infectious
Diseases.

iv. *Outbreaks of Infectious, Contagious, or Epidemic Diseases.*—There has been no new outbreak of infectious disease during the year, but in its closing weeks Measles assumed a more fatal character in the easterly portions of the town. The cases of Smallpox and Scarlet Fever have been exceedingly few, as already explained.

Unwholesome
food.

v. *Examination of, and Action in regard to Suspected Diseased, or Unwholesome Food.*—Fewer seizures of meat and fish have been found necessary than in 1884, when 430 lots of meat and 167 of fish were taken and condemned, whilst last year 337 seizures of meat and 72 of fish were effected. In most cases the meat and fish were voluntarily given up to the Inspectors on the owner discovering its unfitness for human food. Three persons have been prosecuted and fined for exposing unwholesome food for sale. In January William Hodges, of New Canal Street, was charged with exposing for sale the diseased carcase of a pig and sundry pieces of pork from another diseased animal. The magistrates pronounced the case a very bad one, and fined the defendant £15 and costs. Two summonses for offering for sale unwholesome fish were heard in April.

vi. *Duties under Sanitary Bye-Laws and Regulations.*—

These relate to Common Lodging Houses, Houses let in Lodgings, Slaughterhouses, Dairies, Cow Sheds, and places for the storage and sale of Milk.

The number of Common Lodging Houses at the end of the year was 106, registered to accommodate 2,323 lodgers. Common Lodging Houses. More than nine thousand visits have been made to them during the year, 6,992 of which were made by day, and 2,553 by night.

Houses let in Lodgings under the provisions of the Public Health Act of 1875 number 170; the number of lodgers allowed is 959, or an average of 5·6 to each house. The number of these houses is thirty fewer than in the previous year. Houses let in lodgings.

SLAUGHTER-HOUSES.

I regret to say that no reduction has been made during the last three years in the number of private Slaughter-houses in the Borough, of which there are still 270; of these 132 are registered, and 138 licensed. All these figures are exactly identical with those in my Reports for 1882–3–4. Slaughter-houses.

Several applications have been made for Slaughter-house licenses, but, except in two cases, when I recommended that no licenses be granted till certain alterations had been made, I reported that the places were totally unfit to be used for slaughtering.

When advising the Markets and Fairs Committee on the subject of applications for private slaughter-houses, I reported in the following words on the question of a Public Abattoir. Public Abattoir.

“In connection with the question of Slaughter-house provision and the undesirability of multiplying private Slaughterhouses, it appears to me a matter eminently deserving the attention of your Committee whether steps should not be taken for the establishment of a Public Abattoir. As the population of the town increases the demand for slaughtering accommodation will probably increase also. As the establishment of more private slaughter-houses is objectionable on sanitary and other grounds, the only alternative is the provision of a Public Abattoir suitably situated and furnished. Such an establishment would meet at the same time the requirements of the butchers and of the Public Health. The objection of expense would scarcely arise in connection with the question, as the Abattoir, like the Markets, would doubtless be a source of profit.”

DAIRIES, COW SHEDS, AND MILK SHOPS.

The Assistant Inspector who has the supervision of the Milk Shops and Dairies, as well as the Bakehouses, reports Dairies, Cow Sheds, and Milk Shops.

that he has paid 1,661 visits to the Milk Shops and Dairies of the Borough ; in 1884, 3,291 visits were made.

Particular care is now paid to ensure that all newly registered places for the sale of milk shall be suitable from a sanitary point of view for the purpose. It is now recognised that milk is eminently liable to be a medium for conveying several forms of infectious disease. It has thus happened that many applications to obtain registers for the sale of this article have had to be refused, so that somewhat fewer Milk Shops have been opened during the past year than previously ; 120 new registers have been granted, and the total number of places where milk is retailed was at the close of the year about 1,850.

Wherever infectious disease is found to exist on premises where milk is kept, its sale is at once prohibited until all danger that infection may be carried by it appears to be past.

CANAL BOATS ACTS, 1877 AND 1884.

Canal Boats Acts

More than one thousand boats have been examined in order to see that the provisions of these Acts are complied with. In seven instances where flagrant violations of the Acts were discovered, summonses were issued and fines imposed, amounting in the aggregate, including the costs, to over £5.

Sixty-seven boats were registered by your authority during the year ; more than five hundred have now been registered in Birmingham since the passing of the Act of 1877.

BAKEHOUSES.

Bakehouses.

The number of these in the Borough at the end of the year was 496. Owing to the improved condition of the Bakehouses which resulted from the inspections made in 1884 by the officer appointed to supervise them, fewer visits have been necessary during the past year, viz., 366, against 582 in 1884. A considerable portion of the time of this Assistant, who in addition is entrusted with the visitation of the Milk Shops, was taken up in helping to complete a systematic inspection of the Borough, which has been carried on during the year.

Very few sanitary defects in the Bakehouses have been discovered ; indeed, their condition may be considered decidedly satisfactory. In two cases, however, drains were found with openings inside Bakehouses, and an order for their removal was issued and complied with in each case ; while in three instances filth or wash, and in one other two dogs were found, all of which have been removed. Provision is made that every Bakehouse shall be lime-washed twice a year ; this necessary cleansing has been voluntarily carried out in most cases ; in sixty-five instances, however, pressure had to be brought to bear by the Assistant Inspector. Two women and three

youths were found employed who had not come under the cognisance of the Inspector of Factories, so that he might see that the regulations which apply to the labour of females and of youths are complied with. About one hundred such intimations have now been sent since the supervision of the condition of these establishments was transferred from that official to the Sanitary Authority towards the end of the year 1883.

vii. *Offensive Trades*.—Application was made by a firm of solicitors for permission to be given to a client to carry on the trade of a tallow chandler, but I found, on visiting the premises, that the arrangements were not sufficiently advanced to enable me to express any opinion as to their fitness for the purpose.

viii. *Fortnightly Reports of the Medical Officer of Health to the Health Committee*.—I have presented a report to your Committee at each of its fortnightly meetings on various subjects, embracing the following :—

Fortnightly
Reports of
Medical Officer
of Health.

1. The general health of the Borough, including the total death-rate, Zymotic death-rate, and average age at death.
2. The occurrence of Infectious disease, and the results of the investigation of certain of the most dangerous cases.
3. The Waters supplied from shallow wells and by the Corporation.
4. Articles of Food, Drink, and Drugs obtained for analysis.
5. Diseased and unwholesome Food.
6. Reports on special questions in pursuance of resolutions, instructions, and otherwise.

BOROUGH HOSPITAL.

Into this Institution there have been admitted during the year 81 cases of Smallpox and 204 of Scarlet Fever, making a total of 285. In 1884, 797 cases were treated here, 437 of the patients suffering from Smallpox and 360 from Scarlet Fever. The admissions in each quarter since the last one of 1874 are given in the subjoined statement :—

Borough
Hospital.
Cases admitted
each year.

DATE.	Smallpox.	Scarlatina.	Total Cases.
1874.			
4th Quarter	194	...	194
(2nd Nov. to the end of the year)			
1875.			
1st Quarter	186	...	186
2nd „	169	...	169
3rd „	53	13	66
4th „	12	7	19
Totals	420	20	440

Cases admitted
into Borough
Hospital each
year.
(Continued).

DATE.				Smallpox.	Scarlatina.	Total Cases.
1876.						
1st Quarter	...	...	...	2	1	3
2nd "	...	...	...	2	4	6
3rd "	...	...	...	2	5	7
4th "	...	...	...	5	28	33
Totals	...	...	...	11	38	49
1877.						
1st Quarter	...	...	...	4	20	24
2nd "	...	...	...	19	7	26
3rd "	...	...	...	15	13	28
4th "	...	...	...	—	3	3
Totals	...	...	...	38	43	81
1878.						
1st Quarter	...	...	...	3	13	16
2nd "	...	...	...	4	34	38
3rd "	...	...	...	6	139	145
4th "	...	...	...	7	238	245
Totals	...	...	...	20	424	444
1879.						
1st Quarter	...	...	...	1	60	61
2nd "	...	...	...	—	37	37
3rd "	...	...	...	3	40	43
4th "	...	...	...	—	47	47
Totals	...	...	...	4	184	188
1880.						
1st Quarter	...	...	...	2	45	47
2nd "	...	...	...	3	27	30
3rd "	...	...	...	8	36	44
4th "	...	...	...	3	62	65
Totals	...	...	...	16	170	186
1881.						
1st Quarter	...	...	...	8	36	44
2nd "	...	...	...	8	79	87
3rd "	...	...	...	1	91	92
4th "	...	...	...	—	127	127
Totals	...	...	...	17	333	350
1882.						
1st Quarter	...	...	...	—	90	90
2nd "	...	...	...	54	120	174
3rd "	...	...	...	38	197	235
4th "	...	...	...	13	220	233
Totals	...	...	...	105	627	732
1883.						
1st Quarter	...	...	...	46	120	166
2nd "	...	...	...	160	157	317
3rd "	...	...	...	481	198	679
4th "	...	...	...	403	163	566
Totals	...	...	...	1,090	638	1,728

DATE.				Smallpox.	Scarlatina.	Total Cases.	Cases admitted into Borough Hospital each year (Continued).
1884.							
1st Quarter	...	...	...	359	41	400	
2nd "	...	...	...	56	94	150	
3rd "	...	...	...	12	124	136	
4th "	...	...	...	10	101	111	
Totals	...	...	...	437	360	797	
1885.							
1st Quarter	...	...	...	66	59	125	
2nd "	...	...	...	4	37	41	
3rd "	...	...	...	9	50	59	
4th "	...	...	...	2	58	60	
Totals	..	...	...	81	204	285	

It will be seen that fewer cases have been received into the Hospital during the past year than in any year since 1880. This is not the result of a lessened appreciation by the public of its advantages, but of the fact that the diseases treated in it, taken together, have been far less prevalent than in any year since this Institution was first opened.

DISINFECTING STATION.

As compared with recent years, few articles have been disinfected at the Borough Station during the year, viz., 4,394, against 12,649 in 1884, and no fewer than 34,867 in 1883.

The relatively small use made of the Station is the inevitable consequence of the comparative absence from the Borough of infectious diseases during the last twelve months.

The number of articles sent for disinfection during the last eight years is set forth in the annexed statement :—

ARTICLES DISINFECTED.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
Beds ...	466	221	128	181	452	2,165	855	259
Mattresses ...	290	339	229	358	517	1,109	592	197
Sheets ...	424	192	73	164	557	1,024	1,033	279
Blankets ...	353	241	113	290	556	1,833	1,749	376
Counterpanes ...	262	154	70	121	264	893	593	236
Pillows & Bolsters	899	586	317	481	940	3,397	2,325	603
Other Articles ...	4,282	2,645	1,632	1,940	4,920	24,446	5,502	2,444
Totals ...	6,976	4,378	2,562	3,535	8,206	34,867	12,649	4,394

Cost of
Disinfecting
Station.

The estimated Cost of the Station during the year is:—

	£	s.	d.
Wages	140	9	0
Horse-keep, Shoeing, &c. ...	86	0	0
Gas for Heating and Lighting...	13	5	8
Coal	5	0	0
Water	2	0	0
Total	<u>£246</u>	<u>14</u>	<u>8</u>

MORTUARIES.

Mortuaries.

So many as 194 bodies have been taken to these establishments during the past year; in 1884 the number was 176. A perusal of the figures in the annexed table will show that an ever increasing use is made of these valuable sanitary adjuncts. The number of corpses taken to the several Mortuaries during each of the last ten years is as follows:—

	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
Moor Street ...	3	32	32	28	15	13	30	76	58	66
Ladywood Rd.	—	13	5	12	7	17	17	10	23	9
Kenyon Street	—	8	10	14	10	25	22	46	42	44
Duke Street...	1	12	10	11	12	9	17	10	18	38
Moseley Street	—	—	—	6	8	8	25	26	35	37
Totals ...	4	65	57	71	52	72	111	168	176	194

WATER SUPPLY.

Water Supply.

The two main sources from which the drinking water of the town is derived, that from the Corporation mains and that from shallow wells, are continually kept under observation, one result being that the number of wells in the Borough has shrunk, as shown by the recent sanitary Census made by the Department, to about 1,260.

The organic matter in the town water, which seems to be largely of vegetable origin, has slightly increased during the past year. Corporation Supply.

In addition to the monthly analyses of the Corporation supply 234 well waters have also been subjected to examination. Well Waters. In the majority of instances it was found that the nature of the water was such as to render it very undesirable for domestic use. Intimations of the character of such waters were sent to the owners of the property on which they were situated, and in nearly every case the wells have been closed without the necessity for recourse to legal measures.

I have also made during the year sixty-eight analyses of articles of a miscellaneous nature, other than waters and the articles of food procured by the Inspector. Miscellaneous Analyses.

PUBLIC BATHS.

The exceptionally large number of Bathers who in 1884 patronised the Baths provided by the Corporation has not been maintained during the past year, for the total number of Bathers at all the Baths has fallen from 445,545 in 1884, to 348,344 in 1885. It will be remembered by many that the summer of 1884 was an unusually warm one, and the unprecedentedly large number of Bathers was, as I stated in my last Annual Report, to be expected. The greater portion of the past summer was particularly cool, and to this circumstance is unquestionably attributable much of, if not all, the decreased use which has been made of the Public Baths during the year under review. Public Baths.

RETURN OF THE NUMBER OF BATHERS AT EACH OF THE CORPORATION BATHS DURING THE LAST
TEN YEARS.

	KENT STREET.			WOODCOCK STREET.			NORTHWOOD STREET.			MONUMENT ROAD.			SMALL HEATH.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
1876	107647	4880	112527	76781	2451	79232	99941	2832	102773	—	—	—	—	—	—
1877	95428	4397	99825	58432	2012	60444	83844	2153	85997	—	—	—	—	—	—
1878	106820	6016	112836	64680	2171	66851	101059	2129	103188	—	—	—	—	—	—
1879	105395	7274	112669	48794	1501	50295	82408	2027	84435	—	—	—	—	—	—
1880	108253	8468	116721	71843	2051	73894	115446	3166	118612	—	—	—	—	—	—
1881	115260	8768	124028	64014	1762	65776	106550	2704	109254	—	—	—	—	—	—
1882	112141	8509	120650	68272	2015	70287	113036	4049	117085	—	—	—	—	—	—
1883	101503	8025	109528	72852	2025	74877	96115	3093	99208	88073	5245	93318	8258	282	8540
1884	115608	8812	124420	80279	2079	82358	103421	3506	106927	101173	6917	108090	23009	741	23750
1885	90238	8749	98977	66111	1468	67579	77687	3039	80726	77791	6016	83807	17008	247	17255

SEWERAGE WORKS.

Nearly eight miles of Sewers have been constructed during the past year by the authority of the Town Council. This includes, however, the whole of a new Sewer in connection with the united Drainage Scheme, known as the "Cole Valley Sewer," which for a considerable part of its distance is situated outside the Borough. Sewerage Works.

Sewers have also been laid in several undeclared highways at the cost of the owners of the property to be drained into them.

There are now altogether about $194\frac{3}{4}$ miles of Sewers under the control of the Corporation. Total length of Sewers.

STREETS AND ROADS.

At the end of the year there were $199\frac{1}{4}$ miles of Streets and Roads in the Borough, or only one-fourth of a mile more than in the previous year, few new streets having been cut, and one, Wharf Street, having been obliterated; $191\frac{1}{2}$ miles are maintained by the Corporation, $1\frac{1}{4}$ miles are completed but not at present declared public highways, $1\frac{1}{4}$ miles are kept in repair by certain Local Board Districts which adjoin the Borough, $2\frac{1}{4}$ miles are private roads, and about three miles remained at the close of the year in an unfinished state. Streets and Roads.

NIGHTSOIL AND REFUSE DISPOSAL.

The abolition of the midden privies still continues, while the number of pan privies has further increased somewhat during the year, the number at its close being 39,935. The removal of the pans was effected in 1,982,307 instances; 75,086 loads of ashes had in addition to be collected from the ash-tubs. There are still nearly 13,000 ashpits in the Borough; they were emptied in 20,000 instances, so that the filth from these receptacles was not removed oftener than on an average about once in seven months, though they contained altogether 51,192 loads of nightsoil. Nightsoil and Refuse disposal

There are also about eleven thousand Waterclosets in the Borough. Waterclosets.

The

SANITARY WORK

of the Borough has been most vigorously prosecuted; no better proof of this could be afforded than is given by the fact that no fewer than 17,930 nuisances were removed during the year. The discovery of the greater portion of these has resulted from the Sanitary work.

SYSTEMATIC INSPECTION OF THE BOROUGH,

which was begun in May, 1884, and was completed at the end of last year; in some of the Wards it was finished at an earlier date, but in others in the outlying districts, and with larger areas, it took much longer time to complete. Systematic Inspection of the Borough.

As this Sanitary Inspection was in progress for some eighteen months, the tabulated results constituting a modified Sanitary Census, which will be found on pages 58-66, must be looked upon as showing what was in existence in the middle of this period, or some nine months prior to the end of last year. The figures in the table may be regarded as an approximate indication of the number of houses, their situation, etc., in the Borough, say in March, 1885. More than 86,000 houses were inspected, 49,063 of which were front houses, while 37,541 were situated at the back of other houses; 4,783 of these were void, leaving 81,821 inhabited. This number of inhabited houses gives upon the estimated population at the middle of last year 5.2 persons in a house, while at the last Census there were found to be on an average 5.1 persons in each house in the Borough. The continued depression of trade would be likely to bring about in some cases the sub-letting of houses, and thus lead to the fractional increase observable in the average number of persons per house.

Particulars of the number of houses and their situation, the number of waterclosets, pan and ashpit privies, the number of wells, and the population based on an estimate of 5.2 persons in each inhabited house, in each block of each ward, are set forth in the subjoined statement :— *

ROTTON PARK WARD.

Block.	Inhabited houses		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'rs.
	Front.	Back.						
1	297	319	4	10	128	136	2	3,159
2	318	373	28	14	221	126	7	3,426
3	143	200	2	5	93	54	1	1,760
4	80	68	3	9	106	15	2	748
5	57	94	3	4	75	21	2	765
6	182	226	3	30	262	13	3	2,090
7	490	288	21	8	376	121	12	3,909
8	307	228	32	4	296	44	8	2,602
9	356	243	37	15	294	116	10	2,906
10	134	242	20	8	186	30	10	1,841
11	336	417	27	33	328	144	4	3,751
12	302	267	16	245	162	119	12	2,850
13	199	—	12	307	20	91	24	967
14	165	2	5	122	84	26	27	838
Total	3,366	2,967	213	814	2,631	1,056	124	31,612

* The various blocks are marked and numbered on the Disease Map at the end of the Report.

ALL SAINTS' WARD.

Block.	Inhabited houses		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'ts.
	Front.	Back.						
1	502	535	109	27	449	130	3	4,809
2	168	78	9	1	141	27	3	1,205
3	550	223	33	29	368	100	6	3,824
4	354	366	51	23	281	100	3	3,462
5	433	154	30	9	339	57	22	2,878
6	738	632	65	14	625	196	7	6,746
7	109	116	29	23	122	32	1	1,017
8	369	304	11	5	283	90	—	3,418
9	462	405	20	23	517	63	—	4,373
10	156	172	11	15	159	25	1	1,638
11	264	269	20	8	330	31	1	2,651
Total	4,105	3,254	388	177	3,614	851	47	36,021

LADYWOOD WARD.

Block.	Inhabited houses		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'ts.
	Front.	Back.						
1	259	259	14	3	187	47	—	2,600
2	304	290	35	3	323	19	—	2,883
3	515	413	55	67	448	66	3	4,503
4	322	2	13	36	175	73	3	1,605
5	337	489	18	5	201	126	1	4,168
6	241	393	16	10	183	63	1	3,188
7	275	351	20	61	241	74	1	3,127
8	308	395	20	62	240	60	1	3,524
9	147	79	11	121	130	41	—	1,109
10	125	11	7	137	49	24	1	665
11	288	175	19	79	181	74	1	2,290
Total	3,121	2,857	228	584	2,358	667	12	29,662

SAINT PAUL'S WARD.

Block.	Inhabited houses		Number of					
	Front.	Back.	Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'ts.
1	300	220	32	52	170	86	2	2,518
2	182	141	15	43	108	41	1	1,589
3	174	152	30	35	119	45	1	1,527
4	419	371	57	51	277	126	1	3,782
5	206	44	20	62	125	72	1	1,187
6	105	166	27	136	352	113	2	1,260
7	205	122	29	124	223	53	1	1,527
8	223	241	35	75	225	62	1	2,214
9	149	128	14	53	164	37	1	1,358
10	215	177	23	97	197	65	1	1,904
Total	2,178	1,762	282	728	1,960	700	12	18,866

SAINT GEORGE'S WARD.

Block.	Inhabited houses		Number of					
	Front.	Back.	Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'ts.
1	263	178	21	58	215	43	—	2,167
2	242	188	11	18	159	65	—	2,162
3	274	317	34	12	249	63	—	1,881
4	355	200	19	2	185	70	—	2,765
5	317	433	85	8	231	80	—	3,430
6	269	359	44	7	237	69	—	3,012
7	172	203	26	29	140	33	—	1,801
8	237	324	50	28	210	36	—	2,636
9	198	126	26	133	147	35	1	1,537
10	196	159	28	66	164	46	2	1,686
Total	2,523	2,487	344	361	1,937	540	3	23,077

SAINT STEPHEN'S WARD.

Block.	Inhabited houses		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'ts.
	Front.	Back.						
1	300	235	30	14	247	65	1	2,605
2	181	176	25	38	91	42	1	1,713
3	202	282	16	45	135	72	—	2,415
4	351	556	62	15	296	62	1	4,360
5	335	342	19	16	236	77	1	3,395
6	169	172	44	8	102	44	1	1,532
7	40	34	9	8	18	9	—	333
8	130	103	25	6	61	34	—	1,471
9	252	254	41	5	178	61	—	2,399
10	111	145	14	2	123	39	—	1,249
11	86	56	15	5	58	17	2	655
Total	2,157	2,355	300	162	1,545	522	7	22,127

SAINT MARY'S WARD.

Block.	Inhabited houses		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'ts.
	Front.	Back.						
1	126	128	20	21	94	8	—	1,208
2	96	73	5	55	71	18	1	847
3	306	352	59	28	364	31	2	3,091
4	138	103	32	54	166	25	—	1,079
5	222	181	42	19	175	29	1	1,863
6	220	245	76	15	209	20	—	1,907
7	278	200	45	15	284	35	—	2,235
8	202	127	22	13	170	26	—	1,584
9	139	85	42	66	76	15	—	950
10	239	260	48	18	266	41	—	2,585
11	257	148	20	34	192	60	1	1,986
Total	2,273	1,902	411	338	2,067	308	5	19,335

SAINT BARTHOLOMEW'S WARD.

Block.	Number of							
	Inhabited houses		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'ts.
	Front.	Back.						
1	257	215	30	129	311	34	17	2,280
2	415	512	52	82	425	46	4	4,514
3	326	300	26	43	343	41	4	3,095
4	178	138	20	26	158	34	4	1,527
5	175	104	14	16	134	14	—	1,368
6	201	108	21	42	198	22	1	1,487
7	199	188	25	94	181	35	5	1,868
8	218	242	44	34	245	26	—	2,147
9	430	384	65	17	355	68	5	3,864
10	333	286	27	34	267	45	3	3,054
11	370	136	37	21	320	55	6	2,420
Total	3,102	2,613	361	538	2,937	420	49	27,624

MARKET HALL WARD.

Block.	Number of							
	Inhabited houses		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'ts.
	Front.	Back.						
1	122	48	14	263	49	23	3	805
2	147	65	36	267	78	16	—	908
3	177	163	30	123	197	54	1	1,600
4	234	72	27	405	162	58	—	1,440
5	206	30	31	955	50	88	1	1,058
6	227	182	48	117	159	32	4	1,863
7	103	34	26	368	47	36	—	593
8	215	64	31	224	94	32	14	1,281
9	422	374	77	91	409	52	13	3,710
Total	1,853	1,032	320	2,813	1,245	391	36	13,258

SAINT THOMAS' WARD.

Block.	Inhabited houses		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'ts.
	Front.	Back.						
1	217	124	4	36	93	56	2	1,738
2	160	162	5	7	91	42	—	1,635
3	224	212	27	84	188	33	2	2,111
4	304	566	15	5	353	63	2	4,411
5	82	44	18	37	72	11	1	558
6	253	220	13	23	164	50	—	2,373
7	189	134	4	24	129	26	—	1,599
8	192	214	18	23	160	42	1	2,002
9	283	285	11	52	224	51	1	2,873
10	219	265	25	50	162	55	2	2,369
11	99	31	10	86	62	27	—	620
12	142	149	58	14	118	21	1	1,203
13	51	26	15	74	46	22	—	320
Total	2,415	2,432	223	515	1,862	499	12	23,812

SAINT MARTIN'S WARD.

Block.	Inhabited houses		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'ts.
	Front.	Back.						
1	476	551	33	20	337	90	18	5,119
2	429	462	24	32	222	133	22	4,472
3	402	291	21	17	236	139	22	3,467
4	298	250	9	22	176	82	3	2,781
5	323	320	26	31	296	109	5	3,183
6	293	149	21	26	140	33	21	2,172
7	205	189	22	32	120	51	6	1,919
8	183	56	16	103	93	26	16	1,152
Total	2,609	2,268	172	283	1,620	663	113	24,265

EDGBASTON WARD.

Block.	Inhabited houses		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'rs.
	Front.	Back.						
1	827	913	42	32	593	260	30	8,759
2	549	180	20	298	158	367	82	3,659
3	512	—	32	191	145	300	67	2,477
4	197	—	11	226	39	124	58	960
5	154	—	14	163	13	98	26	723
6	355	49	14	277	69	157	26	2,012
7	83	—	3	51	22	34	21	413
8	276	—	6	426	28	149	23	1,394
9	261	—	4	321	44	149	38	1,326
10	432	45	14	546	52	267	39	2,388
Total	3,646	1,187	160	2,531	1,163	1,905	410	24,111

DERITEND WARD.

Block.	Inhabited houses		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'rs.
	Front.	Back.						
1	555	579	40	16	455	128	16	5,646
2	418	398	58	9	291	147	12	3,910
3	211	115	13	30	69	157	7	1,615
4	422	454	30	17	334	119	9	4,365
5	471	422	32	25	325	139	11	4,442
6	368	300	45	71	320	64	8	3,214
7	275	244	22	66	190	53	6	2,564
8	372	169	—	21	177	126	8	2,791
Total	3,092	2,681	240	255	2,161	933	77	28,547

BORDLESLEY WARD.

Block.	Inhabited houses		Number of					
	Front.	Back.	Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'rs.
1	566	311	24	15	424	231	28	4,401
2	321	168	11	56	318	46	21	2,467
3	169	129	27	5	212	24	1	1,398
4	555	578	65	11	591	102	16	5,510
5	541	416	57	69	360	231	23	4,644
6	849	652	90	16	665	245	12	7,279
7	613	290	63	11	501	148	26	4,334
8	325	156	22	14	197	124	33	2,420
9	449	78	45	54	277	103	33	2,486
10	247	71	23	60	227	42	12	1,471
11	139	5	7	95	55	67	27	708
12	584	268	21	11	667	57	19	4,288
13	146	—	17	121	130	67	31	666
14	565	154	18	24	371	203	29	3,617
Total	6,069	3,276	490	562	4,995	1,690	311	45,689

DUDDESTON WARD.

Block.	Inhabited houses		Number of					
	Front.	Back.	Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabit'rs.
1	359	173	17	31	276	47	1	2,658
2	244	165	28	34	262	22	1	1,966
3	278	180	26	13	234	40	—	2,229
4	321	112	22	15	140	129	1	2,121
5	226	335	30	12	241	44	1	2,894
6	140	26	14	15	63	64	6	784
7	340	167	18	8	227	103	5	2,522
8	310	203	38	9	272	82	3	2,451
9	296	355	66	7	307	68	—	3,018
10	306	156	18	8	163	141	—	2,290
Total	2,820	1,872	277	152	2,185	740	18	22,933

NECHELLS WARD.

Block.	Number of							
	Inhabited houses		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies	Wells.	Inhabit'rs.
	Front.	Back.						
1	439	566	65	7	358	123	—	4,849
2	723	537	84	29	502	192	2	6,067
3	422	285	76	—	239	141	1	3,256
4	325	375	31	8	195	147	2	3,452
5	379	203	25	—	176	99	—	2,873
6	296	80	12	16	142	93	3	1,878
7	446	200	23	5	311	97	6	3,214
8	460	202	43	6	464	62	5	3,193
9	244	148	15	9	218	73	7	2,461
Total	3,734	2,596	374	80	2,605	1,027	26	31,243

WHOLE BOROUGH.

WARD.	Number of							
	Inhabited houses.		Void Houses.	Water Closets.	Pan Privies.	Ashpit Privies.	Wells.	Inhabitants.
	Front.	Back.						
Rotton Park ...	3,366	2,967	213	814	2,631	1,056	124	31,612
All Saints ...	4,105	3,254	388	177	3,614	851	47	36,021
Ladywood ...	3,121	2,857	228	584	2,358	667	12	29,662
St. Paul ...	2,178	1,762	282	728	1,960	700	12	18,866
St. George ...	2,523	2,487	344	361	1,937	540	3	23,077
St. Stephen ...	2,157	2,355	300	162	1,545	522	7	22,127
St. Mary ...	2,273	1,902	411	338	2,067	308	5	19,335
St. Bartholomew	3,102	2,613	361	538	2,937	420	49	27,624
Market Hall ...	1,853	1,032	320	2,813	1,245	391	36	13,258
St. Thomas ...	2,415	2,432	223	515	1,862	499	12	23,812
St. Martin ...	2,609	2,268	172	283	1,620	663	113	24,265
Edgbaston ...	3,646	1,187	160	2,531	1,163	1,905	410	24,111
Deritend ...	3,092	2,681	240	255	2,161	933	77	28,547
Bordesley ...	6,069	3,276	490	562	4,995	1,690	311	45,689
Duddeston ...	2,820	1,872	277	152	2,185	740	18	22,933
Nechells ...	3,734	2,596	374	80	2,605	1,027	26	31,243
Total	49,063	37,541	4,783	10893*	36,885	12912*	1,262	422,182†

* In 1871, there were 7,065 Water Closets, and 19,551 Ashpits in the Borough.

† The total population of the Borough is made up by adding to the above population that in the several institutions, which amounted to 5,587.

In conclusion, I have pleasure in acknowledging the kindness and valuable services received from all with whom I have had to co-operate, and I may especially mention the great assistance rendered me by your able and zealous Inspector of Nuisances, Mr. Parker, and my Chief Clerk, Mr. Woolley.

I remain,

Mr. Chairman and Gentlemen,

Your obedient Servant,

ALFRED HILL, M.D.,

Medical Officer of Health.



III. APPENDIX.

(TABLES, MAP, AND CHART.)

TABLE I.
BIRTHS AND DEATHS (GROSS NUMBERS.)

DATE.	BIRTHS.	DEATHS.
1885	14,383	8,156
1884	14,991	9,043
1883	14,701	8,714
1882	14,866	8,425
1881	14,869	7,938
1880	15,111	8,088
1879	15,846	8,650
1878	15,964	9,662
1877	16,001	9,038
1876	15,816	8,330
1875	14,862	9,668
Average of Ten years } 1875-1884.	15,303	8,756

NOTES.

- 1.—Population at Census 1881, 400,774.
- 2.—Population, estimated to the middle of the Year 1885, 427,769.
- 3.—Area in Acres, 8,400.
- 4.—Number of Inhabited Houses in Borough at Census 1881, 78,301.
- 5.—Average number of Persons in each House at Census, 1881, 5·1.

TABLE II.
ANNUAL RATE OF MORTALITY, DEATH-RATE AMONG CHILDREN, AND DEATHS IN PUBLIC INSTITUTIONS.

DATE.	Annual rate of Mortality per 1,000 Living.	Deaths of Children under 1 year ; percentage to total Deaths.	Percentage of Deaths of Children under 1 year to Registered Births.	Deaths of Children under 5 years ; percentage to total Deaths.	Percentage of Deaths in Public Institutions to total Deaths.
1885	19.1	27.6	15.7	41.8	15.7
1884	21.1	28.9	17.4	47.7	13.8
1883	21.0	26.8	15.9	43.8	15.7
1882	20.6	29.1	16.5	47.2	15.4
1881	19.7	27.7	15.0	47.1	15.3
1880	20.5	32.1	17.2	49.9	12.4
1879	21.8	27.5	15.0	49.7	14.1
1878	25.2	28.6	17.0	53.1	11.8
1877	23.9	29.1	16.4	49.4	12.2
1876	22.4	30.5	16.0	46.6	11.6
1875	26.3	30.6	19.6	49.4	11.8
Average of 10 years } 1875-1884.	22.2	29.1	16.6	48.4	13.4

TABLE III.

Mortality from certain classes of Diseases, and proportion to population and to 1,000 deaths in 1885.

CLASS OF DISEASES.	Total Deaths.	Death Rate per 1,000 of the population.	Proportion of Deaths to 1,000 Deaths.
1—Seven principal Zymotic Diseases	876	2·0	107
2—Pulmonary (other than Phthisis)	1,704	4·0	209
3—Tubercular 	848	2·0	104
4—Wasting Diseases of Infants ...	725	1·7	89
5—Convulsive Diseases of Infants ...	444	1·0	54

1.—Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, and Diarrhoea.

3.—Includes Phthisis, Scrofula, Rickets, and Tabes.

4.—Includes Marasmus, Atrophy, Debility, and Premature Birth.

5.—Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

TABLE IV.
SHOWING THE NUMBER OF DEATHS IN THE TEN YEARS, 1875 TO 1884, FROM THE SEVEN PRINCIPAL ZYMOTIC
DISEASES, AND THE NUMBER IN 1885.

	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	A Annual Average of 10 years, 1875-1884.	Proportion of deaths to 1,000 years, 1875-1884.	1885.	Proportion of deaths to 1,000 years in 1885.
Smallpox ...	174	0	8	5	0	2	6	17	110	64	39	4.4	12	1.5
Measles ...	141	87	309	54	169	63	132	150	155	333	159	18.2	119	14.6
Scarlet Fever ...	265	204	237	995	306	123	164	256	326	134	301	34.4	31	3.8
Diphtheria ...	55	58	52	83	71	51	57	49	46	40	56	6.4	46	5.7
Whooping Cough ...	438	189	369	455	384	217	362	319	176	289	320	36.5	253	31.0
Fever ...	204	147	144	147	87	84	66	87	81	84	113	12.9	77	9.4
Diarrhoea ...	868	651	457	682	234	784	341	535	412	737	570	65.1	338	41.4
Total ...	2,145	1,336	1,576	2,421	1,251	1,324	1,128	1,413	1,306	1,681	1,558	177.9	876	107.4
London ...	13,411	12,565	10,292	14,734	12,216	13,661	13,811	13,553	10,801	13,629	12,867	153.1	11,262	140.8

TABLE V.

SUMMARY OF NUISANCES AND OTHER MATTERS REPORTED AND WORK DONE BY THE OFFICERS AND MEN EMPLOYED DURING THE YEAR ENDED DECEMBER 31st, 1885.

(Return made by MR. PARKER, Inspector of Nuisances.)

	Nuisances Reported.	Nuisances Abated.
Nuisances remaining on the Books, Dec. 31st, 1884 ...	1,788	—
Defective Drains requiring opening and clearing from obstruction	3,486	3,008
„ Spout Drains	430	348
„ Drains not efficiently trapped	2,136	1,877
„ Sink Drains requiring disconnection from the Sewer	2,905	2,300
Nuisances arising from the want of drains	125	110
„ „ „ the want of an efficient supply of wholesome water	46	63
„ „ „ the keeping of fowls	477	378
„ „ „ an accumulation of water in cellars	129	130
„ „ „ the filthy condition of privies	39	231
„ „ „ foul and defective urinals	683	421
„ „ „ the overcrowding of houses	28	15
„ „ „ the want of efficient ventilation	16	30
Swine and Swine Styes so kept as to be a nuisance	115	118
Houses reported unfit for human habitation	10	13
Houses disinfected, cleansed, and purified, where Zymotic disease has occurred	385	421
Filthy and unwholesome Houses requiring cleansing and whitewashing	1,955	1,806
Accumulations of wash, deposits of offensive matter, manure, &c.	1,140	937
Foul Ashpits and Privies requiring repairs	2,134	1,741
Houses where the privies and ashpits belonging thereto are so foul and defective as to require reconstruction	17	64
Back Yards requiring paving	677	657
Number of Privies linewashed by our own men	884	884
„ Courts or Back Yards	149	149
„ Dangerous Premises reported to the Borough Surveyor's Department	865	844
„ Defective Water Taps and Standpipes reported to the Water Department	737	737
Soil Pipes of Water Closets requiring disconnecting from interior of Dwelling-Houses	1,130	616
Privies requiring reconstructing to Water Closets	31	32
Number of Cases still on the Books under notice	—	4,587
Totals	22,517	22,517
Number of Notices issued for the abatement of Nuisances during the Year ended December 31st, 1885	19,696	
Number of Cases Summoned	45	
„ „ „ Convicted	44	
„ „ „ Withdrawn	1	
Amount of Costs	£3 8 9	
Number of visits to Milkshops		1,661
„ „ „ Bakehouses		366

WELL WATERS.

Well Waters submitted for Analysis	234
„ „ reported polluted	202
No. of Wells closed	219
„ Premises supplied with Tap Water	222
„ Persons Summoned	6

SMOKE NUISANCES.

No. of observations made by the Inspectors	4,260
„ Manufacturers Reported for the emission of dense smoke...	241
„ „ Cautioned	144
„ „ Summoned	87
„ „ Convicted	85
„ „ Withdrawn	2
Amount of Penalties	£67 15 0
„ Costs	£34 9 0

COMMON LODGING HOUSES.

No. of Registered Common Lodging Houses	106
„ Lodgers allowed	2,323
„ Visits by day	6,992
„ Visits by night	2,553
„ Lodgers found occupying the Houses	31,536
„ Houses Registered under the Public Health Act, 1875 ...	170
„ Lodgers allowed	959

THE CANAL BOATS ACT, 1877.

No. of Canal Boats inspected during the Year	1,082
„ Canal Boats registered during the Year	67
„ Persons summoned for Offences against the Act	7
Amount of Penalties	£2 7 6
„ Costs	£3 10 0

SLAUGHTER-HOUSES.

(Return made by MR. BIRCKLEY, Superintendent of the Markets.)

No. of Visits	12,932
Seizures of Bad Meat	337
Weight Destroyed	78,906lbs.
Seizures of Fish, &c.	72

CONTAGIOUS DISEASES (ANIMALS) ACT.

(Return made by MR. BIRCKLEY, Superintendent of the Markets.)

No. of Visits to Railway Stations	1,412
No. of Visits to Cow Houses	504

TABLE VI.

METEOROLOGICAL CONDITION OF THE AIR, AND AMOUNT OF RAINFALL
FOR THE YEAR ENDING DECEMBER 31ST, 1885.

Observed at 9-0 a.m. at the Hollies, Winson Green, by myself and my son, Mr. H. GROSVENOR HILL.

The cistern of the Barometer is 476 feet above the mean level of the sea.

The other Instruments are about 473 feet above the mean level of the sea.

1884. Months.	Pressure of Air.	TEMPERATURE OF THE AIR.				RAINFALL. Gauge 1 foot diameter. Receiving surface 3ft. sin. above the ground.		
	Barometer	Reading of Thermometer.				Depth of Raindepos- ited upon a square foot of surface in inches and parts.	Measure- ment converted into weight per acre.	Number of days on which Rain fell, when 5/100ths of an inch or more was measured.
	Mean Monthly Reading (corrected and reduced to 32 degrees Fahrenheit)	Highest in Shade.	Lowest in Shade.	Range of Tempe- rature in the Month.	Mean Tempe- rature in the Month.			
	In Parts.	Dg. Prts.	Dg. Prts.	Dg. Prts.	Dg. Prts.	In Parts.	Tons.	
January ...	29.359	51.5	24.0	27.5	35.9	1.98	200	9
February ...	29.138	59.5	22.5	37.0	42.2	3.40	343	9
March ...	29.576	55.5	28.5	27.0	40.2	1.02	103	7
April ...	29.293	71.0	27.0	44.0	45.8	2.99	302	11
May ...	29.279	68.0	34.0	34.0	48.3	2.60	263	14
June ..	29.543	82.0	41.0	41.0	58.5	3.97	401	9
July ...	29.675	86.0	44.0	42.0	62.3	0.51	52	3
August ...	29.496	76.0	42.0	34.0	56.9	3.31	334	11
September ...	29.487	74.5	34.5	40.0	54.5	1.94	196	10
October ...	29.257	58.0	32.0	26.0	44.9	4.61	466	14
November ...	29.437	56.0	24.0	32.0	41.1	3.46	349	14
December ...	29.751	51.5	22.0	29.5	37.9	0.65	66	4

PRICES OF COAL, FLOUR, POTATOES, AND BUTCHERS' MEAT,
AND THE NUMBER OF PAUPERS RELIEVED IN THE PARISH OF BIRMINGHAM
DURING EACH OF THE FIVE YEARS ENDED MICHAELMAS, 1881-1885.

Years.	Average Prices of Food and Fuel.				PAUPERISM. Weekly Average of Paupers relieved during the Year.	
	Coal per ton.	Flour per 234lbs.	Potatoes per ton.	Butchers' Meat Per lb.	In-door.	Out-door.
1885	10/1½	20/3	91/3	Beef -/6½ Mut'n -/6¾	2,616	3,697
1884	10/1½	22/1½	70/-	Beef -/7 Mut'n -/7¾	2,544	4,346
1883	10/5	25/2	101/8	-/7¾	2,388	4,861
1882	9/9	29/10	75/-	Beef -/5¾ Mut'n -/8¼	2,355	4,886
1881	9/4	26/10	71/-	Beef -/5¾ Mut'n -/8	2,596	4,767

RAINFALL AND TEMPERATURE IN EACH MONTH AND YEAR FROM 1875 TO 1885.

MONTH.	1875.			1876.			1877.			1878.			1879.			1880.			1881.			1882.			1883.			1884.			Average for 10 yrs. 1875—1884.			1885.		
	Rainfall.	No. of days on which 5-100ths of an inch or more was measured.	Temperature. °	Rainfall.	No. of days on which 5-100ths of an inch or more was measured.	Temperature. °	Rainfall.	No. of days on which 5-100ths of an inch or more was measured.	Temperature. °	Rainfall.	No. of days on which 5-100ths of an inch or more was measured.	Temperature. °	Rainfall.	No. of days on which 5-100ths of an inch or more was measured.	Temperature. °	Rainfall.	No. of days on which 5-100ths of an inch or more was measured.	Temperature. °	Rainfall.	No. of days on which 5-100ths of an inch or more was measured.	Temperature. °	Rainfall.	No. of days on which 5-100ths of an inch or more was measured.	Temperature. °	Rainfall.	No. of days on which 5-100ths of an inch or more was measured.	Temperature. °	Rainfall.	No. of days on which 5-100ths of an inch or more was measured.	Temperature. °	Rainfall.	No. of days on which 5-100ths of an inch or more was measured.				
January	3.12	16	44.4	1.75	6	36.1	4.47	18	42.8	1.96	11	43.2	2.01	10	32.4	0.69	3	33.7	0.96	4	28.4	2.41	7	40.5	4.21	14	40.3	3.04	13	43.2	2.46	10	38.5	1.98	9	35.9
February	1.68	10	36.0	2.55	14	39.6	2.43	12	44.5	1.11	8	40.1	3.68	18	38.5	3.12	16	41.0	3.43	13	36.3	2.15	5	41.9	3.53	13	42.4	1.66	11	40.8	2.53	12	40.1	3.40	9	42.2
March	0.81	5	40.7	3.16	22	40.8	2.72	15	40.3	1.17	9	43.6	0.95	9	40.7	0.53	3	41.7	2.37	11	41.0	2.57	6	45.6	1.44	9	35.1	2.74	7	43.1	1.85	10	41.3	1.02	7	40.2
April	1.09	7	47.2	1.98	13	47.5	2.82	12	45.0	2.17	11	48.3	3.39	16	43.6	2.35	7	46.0	0.78	3	44.3	4.18	17	47.0	0.98	6	47.1	1.62	9	44.2	2.14	10	46.0	2.99	11	45.8
May	2.10	12	54.1	1.00	5	48.1	2.27	9	48.2	5.33	21	54.7	4.26	13	50.1	1.62	6	50.6	1.48	7	53.9	3.19	11	52.9	1.38	9	51.5	1.06	7	52.8	2.37	10	51.7	2.60	14	48.3
June	3.91	15	58.0	2.23	8	58.0	2.96	10	59.0	3.37	14	60.8	6.16	19	56.0	2.55	17	56.2	1.74	15	57.9	4.00	15	55.7	3.63	9	57.0	2.32	5	57.4	3.29	13	57.6	3.97	9	58.5
July	8.14	13	58.9	1.42	6	63.7	5.03	12	59.8	0.98	7	63.7	3.97	18	59.0	4.80	20	59.8	1.66	9	62.5	3.83	14	60.0	3.95	11	58.4	2.67	15	61.7	3.64	13	60.7	0.51	3	62.3
August	1.80	7	62.0	1.22	5	62.7	2.29	10	61.6	6.44	18	62.0	5.72	13	60.1	0.80	4	60.9	5.18	16	57.4	2.48	12	59.2	0.64	5	60.5	1.74	4	64.1	2.83	9	61.0	3.31	11	56.9
September	3.89	14	59.3	5.83	21	55.7	4.58	13	54.9	3.15	13	56.9	3.59	12	55.6	4.63	10	58.7	1.65	9	54.4	3.03	9	53.7	5.89	15	55.9	1.19	6	58.5	3.74	12	56.4	1.94	10	54.5
October	7.21	16	47.4	2.26	9	53.0	1.91	12	49.1	3.66	16	52.2	2.06	9	49.6	6.38	11	44.0	3.17	11	45.2	6.61	15	48.9	2.64	12	49.2	1.44	7	48.8	3.73	12	48.7	4.61	14	44.9
November	3.31	10	41.9	2.94	8	43.4	2.87	15	47.4	3.15	11	39.4	1.98	12	40.9	2.30	9	40.1	3.13	16	47.3	4.56	18	42.0	4.47	15	41.9	1.61	8	41.8	3.03	12	42.6	3.46	14	41.1
December	1.45	10	39.1	5.68	19	42.9	2.40	11	41.3	2.44	11	31.2	1.07	5	35.3	3.48	13	41.7	3.40	9	37.9	4.59	18	37.8	1.02	5	40.4	2.43	12	39.5	2.80	11	38.7	0.65	4	37.9
Year	38.51	135	49.1	32.02	136	49.3	36.75	149	49.5	34.93	150	49.7	38.84	154	46.8	33.25	119	47.9	23.95	123	47.2	43.60	147	48.8	33.78	123	48.3	23.52	104	49.7	34.41	134	48.6	30.44	115	47.4

TABLE VIII.

NEW CASES OF DISEASE COMING UNDER TREATMENT DURING THE YEAR 1885,
AT THE FOLLOWING INSTITUTIONS.

DISEASES.	I. General Hospital.	II. General Dispensary	III. Queen's Hospital.	IV. Children's Hospital.	V. The Work- house.	VI. Out-door Pauper Patients.	VII. Boro' Hosptl.	TOTAL.
Smallpox .....	...	4	...	...	...	4	81	89
Measles	9	54	9	35	4	142	...	253
Scarlet Fever.....	7	3	7	48	4	23	204	296
Diphtheria	9	5	10	23	...	...	...	47
Whooping Cough ...	16	124	14	971	79	311	...	1,515
Croup	8	1	10	18	...	3	...	40
Diarrhoea	3,366	219	1,688	706	75	244	...	6,298
Dysentery .....	...	1	...	8	1	...	...	10
Asiatic Cholera .....	...	...	...	...	...	...	...	...
Erysipelas	61	45	50	13	13	25	...	207
Continued Fever ...	...	1	...	...	...	9	...	10
Typhus .....	...	...	...	...	...	...	...	...
Enteric or Typhd.	28	51	23	19	14	5	...	140
Relapsing .....	...	1	...	...	...	...	...	1
Febricula	63	30	41	56	...	62	...	252
Ague .....	...	...	2	...	...	1	...	3
Rheumatic Fever ...	75	235	96	27	...	123	...	556
Puerperal Fever ...	...	3	1	...	7	1	...	12
Bronchitis & Catarrh	902	2,408	1,016	1,428	600	3,111	...	9,465
Influenza .....	...	19	...	...	...	...	...	19
Pleurisy & Pneumonia	310	243	120	200	97	121	...	1,091
Phthisis	331	1,398	383	90	393	323	...	2,918
Constit. Syphilis.....	161	99	262	243	280	158	...	1,203
All other diseases ...	19,544	16,602	9,839	8,134	4,417	4,850	...	63,386
Accidents	11,442	181	10,557	165	225	67	...	22,637
Totals.....	36,332	21,727	24,128	12,184	6,209	9,583	285	110,448

The above returns are made by (I.)—G. Coulson Bull, Esq., F.R.C.S.; (II.)—Sidney C. Lawrence, Esq., L.R.C.P., E. Dormer Kirby, Esq., M.B., J. Howard North, Esq., L.R.C.P., and Thomas Nelson, Esq., M.B.; (III.)—William Richards, Esq., M.B.; (IV.)—W. A. Payne, Esq., M.R.C.S.; (V.)—Walter Bowen, Esq., Clerk to the Guardians; (VI.)—A. B. Simpson, Esq., L.R.C.S., Surgeon; (VII.)—W. H. Line, Esq., B.A., M.D., Medical Superintendent.

TABLE IX.—WATER: RESULTS OF ANALYSES

Date of Receipt of Samples.	DESCRIPTION.	Temp. C.	Total Solid Impurity.	Organic Carbon.	Organic Nitrogen.
1885. CORPORATION SUPPLY.					
Jan. 6th	1 Court, Thorp Street	5°·6	26·12	·098	·027
Feb. 3rd	5 Court, Nelson Street	7°·8	31·02	·078	·019
Mar. 4th	17 Court, Clark Street	8°·3	26·38	·098	·023
April 8th	11 Court, Bartholomew Street	8°·9	26·62	·176	·061
May 6th	6 Court, Navigation Street	9°·4	25·80	·108	·036
June 3rd	12, Hooper Street	13°·3	31·46	·041	·015
July 6th	11 Court, Dartmouth Street	17°·8	24·14	·155	·049
Aug. 28th	132, Steelhouse Lane.....	15°·0	25·20	·117	·037
Sept. 7th	3, Hawthorne Road	14°·4	27·80	·109	·035
Oct. 7th	16 Court, Great Barr Street	10°·5	24·18	·100	·037
Nov. 2nd	104, Newhall Street	8°·9	29·86	·093	·049
Dec. 2nd	Wellington Square, Wellington Street	8°·3	30·28	·105	·027
	Average Results 1885...	10°·7	27·37	·106	·035
	„ „ 1884...	11°·7	29·78	·103	·024
	„ „ 1883...	11°·4	27·23	·148	·027
	„ „ 1882...	11°·9	29·15	·171	·028
	„ „ 1881...	10°·8	26·98	·185	·029
WELL WATERS.					
Jan. 5th	160, Bristol Street .....	...	130·20	...	large
„ „	162, Bristol Street .....	...	99·80	...	„
„ „	166, Bristol Street .....	...	87·20	...	moderate
„ „	14, Belgrave Road .....	...	85·40	...	very large
„ „	Premises occupied by Mr. S. Cox, and No. 12, Gibb Street (Scarlet Fever) ...	...	152·80	...	„
„ „	78—80, Allison Street .....	...	223·80	...	„
„ 12th	85, Ladypool Road .....	...	90·20	...	rather large
„ „	101 and 102, Kyrwick's Lane .....	...	108·80	...	moderate
„ „	95 and 96, Kyrwick's Lane .....	...	110·20	...	„
„ „	41 to 45, Highgate Road .....	...	177·40	...	„
„ „	37 and 38, Nechells Park Road ...	...	148·80	...	...
„ „	15 and 16, Cromwell Street .....	...	190·80	...	rather large
„ 16th	13, Pershore Road .....	...	138·20	...	large
„ 19th	130 and 131, Wellington Street ...	...	112·20	...	very large
„ „	132—135, Wellington Street.....	...	141·80	...	...
„ „	115, Winson Green Road .....	...	94·20	...	large
„ „	Winson Bridge House, Winson Green Road.....	...	53·40	...	very large
„ „	Winson Green House, Winson Green Road.....	...	123·80	...	...
Feb. 2nd	5 Court, Bordesley Park Road (first Pump) .....	...	126·20	...	...
„ „	Do. do. do. (second Pump) .....	...	92·80	...	very large
„ 9th	32, Belgrave Road .....	...	102·20	...	„
„ „	75, Balsall Heath Road.....	...	115·80	...	„
„ 16th	27, Little King Street.....	...	136·80	...	...

EXPRESSED IN PARTS PER 100,000.

Ammonia	Nitrogen as Nitrates and Nitrites.	Total Combined Nitrogen.	Previous Sewage or Animal Contami- nation. (Estimated)	Chlorine.	Hardness.			REMARKS.
					Tempo- rary.	Perma- nent.	Total.	
·001	·275	·303	2,440	2·0	6°·0	10°·8	16°·8	Very slightly turbid; very slightly greenish.
·002	·253	·273	2,220	2·1	7°·7	11°·1	18°·8	Clear; very slightly greenish.
·003	·231	·256	2,010	2·1	6°·1	7°·7	13°·8	Very slightly turbid; slightly greenish.
·004	·143	·207	1,140	1·9	6°·9	10°·2	17°·1	Turbid; suspended particles and living animal forms.
·003	·242	·280	2,120	1·8	5°·5	8°·9	14°·4	Very slightly turbid; slightly greenish.
·003	·220	·237	1,900	1·6	11°·0	10°·8	21°·8	Very slightly turbid; slightly greenish.
·001	·205	·255	1,740	1·4	9°·0	8°·7	17°·7	Very slightly turbid; slightly greenish.
·003	·220	·259	1,900	2·0	7°·7	7°·7	15°·4	Slightly turbid; greenish.
·003	·154	·191	1,240	1·6	9°·5	7°·3	16°·8	Very slightly turbid; slightly greenish.
·003	·110	·149	800	1·6	6°·1	8°·1	14°·2	Very slightly turbid; slightly greenish.
·001	·176	·226	1,450	1·9	6°·9	11°·1	18°·0	Slightly turbid; brownish green.
·002	·242	·270	2,110	1·8	7°·7	11°·1	18°·8	Very slightly turbid; slightly greenish blue.
·002	·206	·242	1,760	1·8	7°·5	9°·5	17°·0	
·002	·201	·227	1,710	1·7	7°·3	9°·2	16°·5	
·002	·250	·278	2,190	1·8	7°·5	9°·3	16°·8	
·003	·227	·266	1,870	1·7	6°·8	9°·2	16°·0	
·003	·252	·283	2,220	1·7	7°·6	7°·8	15°·4	
·001	2·42	2·421	23,890	12·8	...	...	...	Clear, very slightly greenish
·004	2·20	2·203	21,710	11·9	...	...	...	Clear
·001	1·76	1·761	17,290	5·3	...	...	...	Clear
·002	1·98	1·981	19,490	8·1	...	...	...	Clear
·005	1·87	1·874	18,420	13·0	...	...	...	Clear
·004	2·75	2·753	27,210	48·8	...	...	...	Clear
·002	·77	·771	7,390	7·1	...	...	...	Clear
·001	3·08	3·081	30,490	8·9	...	...	...	Clear
·004	3·63	3·633	36,010	8·3	...	...	...	Clear
·001	6·93	6·931	68,990	10·9	...	...	...	Clear
·800	4·40	5·059	50,270	16·6	...	...	...	Clear, residue brown
·004	10·45	10·453	104,210	17·6	...	...	...	Clear
·002	2·20	2·201	21,690	11·5	...	...	...	Clear
·005	3·85	3·854	38,220	5·5	...	...	...	Clear
·320	6·71	6·974	69,420	9·9	...	...	...	Clear
·002	3·85	3·851	38,190	7·2	...	...	...	Clear
·005	1·65	1·654	16,220	3·9	...	...	...	Clear
1·500	5·72	6·955	69,230	11·9	...	...	...	Clear
·190	3·41	3·566	35,340	10·9	...	...	...	Clear
·004	·44	·443	4,110	6·2	...	...	...	Clear
·004	2·31	2·313	22,810	8·9	...	...	...	Clear
·003	1·65	1·652	16,200	10·9	...	...	...	Clear
·250	2·09	2·296	22,640	17·5	...	...	...	Clear

TABLE IX.—

Date of Receipt of Samples.	DESCRIPTION.	Temp. C.	Total Solid Impurity	Organic Carbon.	Organic Nitrogen.
1885.	WELL WATERS— <i>continued.</i>				
Feb. 16th	87 and 89, Hingeston Street (smallpox)	...	38·40	...	rather large
" "	74—80, Hingeston Street (smallpox, 2nd time)...	...	53·80	...	"
" "	22 and 23, Parade .....	...	184·40	...	"
" "	93—97, Albert Street .....	...	139·80	...	"
" "	232 and 234, Green Lane .....	...	88·40	...	rather large
" 23rd	101, Summer Road .....	...	74·80	...	moderate
" "	97 and 99, Summer Road .....	...	85·40	...	"
" "	85 and 87, Summer Road .....	...	98·80	...	"
" "	71—75, Summer Road .....	...	94·40	...	"
" "	32 and 33, Wynn Street .....	...	101·80	...	small
" "	11 and 12, Augusta Street .....	...	268·40	...	"
Mar. 9th	22 and 23, Spooner Street .....	...	100·80	...	very large
" "	52, Spooner Street .....	...	58·40	...	"
" "	33, Spooner Street & 4, Scott Street	...	275·80	...	"
" "	77, Vauxhall Road .....	...	141·40	...	large
" "	153, Coventry Road .....	...	105·80	...	"
" "	111 and 113, Muntz Street .....	...	137·40	...	very large
" 16th	128 and 129, Leopold Street .....	...	112·80	...	moderate
" "	15 and 16, Hollier Street .....	...	125·40	...	"
" "	14 and 15 Courts, Leopold Street...	...	133·80	...	large
" "	22 and 23 Courts, Darwin Street ...	...	132·40	...	moderate
" "	Alpha Cottage, Kyrwick's Lane ...	...	129·80	...	large
" "	36, Oughton Place .....	...	159·40	...	very large
" 23rd	201, Coventry Road .....	...	52·80	...	"
" "	10 & 11, Green Street, Winson Green	...	152·40	...	"
" "	11, Belgrave Road .....	...	73·80	...	rather large
" "	4 & 5, Heath Street, Winson Green	...	29·40	...	"
" "	Baker's Buildings, Moilliett Street	...	73·80	...	"
" "	72—75, Norman Street .....	...	62·40	...	moderate
" 30th	380 and 381, Coventry Road .....	...	112·80	...	"
" "	26 & 27, and Back of 1 Miles Street	...	110·40	...	"
" 31st	290, Sherlock Street .....	...	209·80	...	very large
" "	80 and 82, Saint Luke's Road .....	...	182·40	...	"
" "	228, Sherlock Street .....	...	230·80	...	"
April 1st	63, Barford Street South .....	...	317·40	...	very large
" 7th	Back 25, Conybere Street .....	...	88·80	...	moderate
" "	200, Conybere Street .....	...	124·40	...	moderate
" "	202 and 204, Conybere Street .....	...	143·80	...	large
" "	209—213, Conybere Street .....	...	121·40	...	rather large
" "	198—200, Deritend .....	...	213·80	...	rather large
" "	210 and 211, Deritend .....	...	197·40	...	very large
" 13th	131 and 132, Lee Bank Road .....	...	53·80	...	large
" "	133 and 134, Lee Bank Road .....	...	70·40	...	moderate
" "	18 and 19, Upper Ryland Road ...	...	107·80	...	rather large
" "	50 and 51, Cregoe Street .....	...	172·40	...	"
" "	53 and 55, Belgrave Road .....	...	163·80	...	very large
" "	82 and 83, Grant Street .....	...	137·40	...	very large

(continued).

Ammonia	Nitrogen as Nitrates and Nitrites.	Total Combined Nitrogen.	Previous Sewage or Animal Contami- nation. (Estimated.)	Chlorine.	Hardness.			REMARKS.
					Tempo- rary.	Perma- nent.	Total.	
·005	·11	·114	820	5·0	...	...	...	Clear
·005	·22	·224	1,920	5·1	...	...	...	Clear
·130	5·61	5·717	56,850	24·0	...	...	...	Clear
·045	7·48	7·517	74,850	12·9	...	...	...	Clear
·002	·88	·881	8,490	8·4	...	...	...	Clear
·002	1·76	1·761	17,290	5·0	...	...	...	Clear
·001	2·64	2·641	26,090	4·8	...	...	...	Clear
none	1·10	1·100	10,680	6·1	...	...	...	Clear
·001	1·32	1·321	12,890	7·0	...	...	...	Clear
·001	1·54	1·541	15,090	11·9	...	...	...	Clear
·120	15·51	15·609	155,770	32·8	...	...	...	Clear
·006	1·43	1·435	14,030	10·5	...	...	...	Clear
·005	1·10	1·104	10,720	3·3	...	...	...	Clear
·200	16·28	16·445	164,130	27·4	...	...	...	Clear
·002	6·05	6·051	60,190	9·7	...	...	...	Clear
·450	4·18	4·551	45,190	10·1	...	...	...	Clear
·006	3·08	3·085	30,530	12·0	...	...	...	Clear
·003	2·20	2·202	21,700	10·7	...	...	...	Clear
·002	·44	·441	4,090	8·7	...	...	...	Clear
·001	2·75	2·761	27,180	13·5	...	...	...	Clear
·001	5·28	5·281	52,490	11·3	...	...	...	Clear
·003	3·85	3·852	38,200	6·8	...	...	...	Clear
·004	4·62	4·623	45,810	11·4	...	...	...	Clear
·005	·88	·884	8,520	5·2	...	...	...	Turbid, dark sediment
4·500	5·72	9·427	93,950	20·1	...	...	...	Clear
·006	1·54	1·545	15,130	3·2	...	...	...	Clear
·003	·88	·882	8,500	2·6	...	...	...	Clear
·002	·22	·221	1,890	5·2	...	...	...	Clear
·001	·22	·221	1,890	3·0	...	...	...	Clear
·013	3·08	3·090	30,580	14·5	...	...	...	Clear
·025	1·87	1·890	18,580	11·8	...	...	...	Clear
·003	6·82	6·822	67,900	23·1	...	...	...	Clear
1·300	6·27	7·341	73,090	19·9	...	...	...	Clear
·250	3·30	3·506	34,740	29·2	...	...	...	Clear
·003	·99	·992	9,600	27·9	...	...	...	Clear
·003	·88	·882	8,500	7·0	...	...	...	Clear
none	3·52	3·520	34,880	9·8	...	...	...	Clear
·002	3·30	3·301	32,690	13·5	...	...	...	Clear
·002	4·18	4·181	41,490	8·0	...	...	...	Clear
·004	3·63	3·633	36,010	16·0	...	...	...	Clear
·002	9·90	9·901	98,690	15·5	...	...	...	Clear
·003	1·10	1·102	10,700	6·8	...	...	...	Clear
·001	2·42	2·421	23,890	7·2	...	...	...	Clear
·004	3·85	3·853	38,210	12·5	...	...	...	Clear
·060	7·70	7·749	77,170	16·5	...	...	...	Clear; residue brown
·004	2·64	2·643	26,110	11·0	...	...	...	Clear; residue brown
·003	5·72	5·722	56,900	12·5	...	...	...	Clear

TABLE IX.—

Date of Receipt of Samples.	DESCRIPTION.	Temp. C.	Total Solid Impurity	Organic Carbon.	Organic Nitrogen.
1885.	WELL WATERS— <i>continued.</i>				
Apr. 20th	126 and 127, Gooch Street ... ..	...	154·80	...	...
" "	33 Court, Bromsgrove Street .....	...	130·40	...	rather large
" "	118, Great Colmore Street .....	...	239·80	...	...
" "	108, Irving Street .....	...	148·40	...	...
" "	172—174, Lee Bank Road .....	...	199·80	...	moderate
" "	186—187, Lee Bank Road .....	...	182·40	...	moderate
" 27th	108 and 109, Long Street .....	...	108·80	...	...
" "	110 and 111, Long Street .....	...	138·40	...	very large
" "	49 and 50, Long Street .....	...	139·80	...	rather large
" "	24 and 25, Long Street .....	...	192·40	...	...
" "	General Cemetery, Icknield Street	...	39·80	...	...
" "	68 and 70, Branston Street .....	...	146·40	...	large
May 4th	42, Francis Road .....	...	18·80	...	rather large
" "	43 and 44, Francis Road .....	...	40·40	...	rather large
" "	45 and 46, Francis Road .....	...	65·80	...	moderate
" "	47 and 48, Francis Road .....	...	61·40	...	moderate
" "	113, Ryland Road .....	...	145·80	...	...
" "	277 and 279, Bell Barn Road .....	...	42·40	...	moderate
" 11th	1 & 2, Sandon Place, Sandon Road	...	82·80	...	rather large
" "	3 & 4, Sandon Place, Sandon Road	...	75·40	...	rather large
" "	5 & 6, Sandon Place, Sandon Road	...	119·80	...	very large
" "	351, Hagley Road .....	...	94·40	...	...
" "	363 and 365, Hagley Road .....	...	43·80	...	rather large
" "	19 and 20, Albion Street .....	...	202·40	...	large
" 18th	42 and 43, Lee Bank Road .....	...	90·80	...	large
" "	29—32, Sun Street West .....	...	58·40	...	...
" "	1 Court, Sun Street West .....	...	75·40	...	rather large
" "	6—8, Sun Street West .....	...	78·40	...	moderate
" 21st	1—4, Sun Street West .....	...	109·80	...	...
" "	35—40, Spring Street .....	...	72·40	...	moderate
" 26th	Lee Bank Square, Lee Bank Road	...	75·80	...	moderate
" "	49 and 50, Spring Road.....	...	75·80	...	very large
June 1st	Haymill Farm, Coventry Road.....	...	58·80	...	large
" "	House occupied by Dann, Hay Mill, Coventry Road.....	...	73·40	...	moderate
" "	25, Spring Road .....	...	85·80	...	moderate
" "	26, Spring Road .....	...	101·40	...	rather large
" "	41 and 42, Spring Road .....	...	117·80	...	rather large
" "	52, Spring Road .....	...	74·40	...	large
" 8th	128 & 129, High Street, Bordesley	...	155·80	...	large
" "	152½ & 153, High Street, Bordesley	...	200·40	...	moderate
" "	8 Court, Sherlock Street .....	...	71·80	...	...
" "	151 and 152, Moor Street .....	...	141·40	...	large
" "	153 and 154, Moor Street .....	...	141·80	...	very large
" "	119 and 120, Bath Row.....	...	154·40	...	large
" 15th	Well Water supplied through tap from tank, at Northwood Street Baths .....	...	40·80	...	small

(continued).

Ammonia	Nitrogen as Nitrates and Nitrites.	Total Combined Nitrogen.	Previous Sewage or Animal Contami- nation. (Estimated)	Chlorine.	Hardness.			REMARKS.
					Tempo- rary.	Perma- nent.	Total.	
·200	2·75	2·914	28,820	20·8	...	...	...	Clear
·003	3·30	3·302	32,700	16·8	...	...	...	Clear
·380	5·28	5·593	55,610	49·1	...	...	...	Clear
·190	6·05	6·206	61,740	14·0	...	...	...	Clear
·004	1·76	1·763	17,310	63·1	...	...	...	Clear
·003	4·84	4·842	48,100	24·2	...	...	...	Clear
·200	none	·164	1,320	10·1	...	...	...	Clear
·003	5·72	5·722	56,900	11·7	...	...	...	Clear
·003	3·52	3·522	34,900	9·3	...	...	...	Clear
·120	7·70	7·798	77,660	17·0	...	...	...	Clear; residue brownish
·110	·22	·310	2,780	1·5	...	...	...	Turbid; residue brown
·004	5·50	5·503	54,710	23·3	...	...	...	Clear
·007	·11	·115	830	2·8	...	...	...	Clear
·003	1·21	1·212	11,800	3·1	...	...	...	Clear
·004	2·86	2·863	28,310	5·2	...	...	...	Clear
·002	2·42	2·421	23,890	5·1	...	...	...	Clear
·200	8·27	8·434	84,020	15·1	...	...	...	Clear; residue brown
·002	1·10	1·101	10,690	3·5	...	...	...	Clear
·003	1·87	1·872	18,400	7·6	...	...	...	Clear
·004	3·30	3·303	32,710	9·5	...	...	...	Clear
·006	4·39	4·395	43,630	11·8	...	...	...	Clear
·060	3·08	3·129	30,970	12·0	...	...	...	Clear
·003	1·98	1·982	19,500	3·9	...	...	...	Clear
·002	8·36	8·361	83,290	20·0	...	...	...	Clear
·005	3·85	3·854	38,220	10·5	...	...	...	Clear
·030	1·98	2·004	19,720	6·0	...	...	...	Clear
·003	4·18	4·182	41,500	10·1	...	...	...	Clear
·001	2·86	2·861	28,290	8·9	...	...	...	Clear
·090	3·85	3·924	38,920	10·9	...	...	...	Clear
·002	2·75	2·751	27,190	7·6	...	...	...	Clear
·025	·99	1·010	9,780	11·2	...	...	...	Clear
·007	·11	·115	830	7·5	...	...	...	Turbid
·003	·22	·222	1,900	2·6	...	...	...	Clear
·002	·22	·222	1,890	2·3	...	...	...	Clear
·001	1·76	1·760	17,290	5·5	...	...	...	Turbid
·002	·55	·552	5,190	8·4	...	...	...	Clear
·003	·77	·772	7,400	4·8	...	...	...	Clear
·003	1·98	1·982	19,500	4·9	...	...	...	Clear
·004	3·08	3·083	30,510	13·5	...	...	...	Clear
·002	4·07	4·072	40,390	17·6	...	...	...	Clear
·380	2·31	2·623	25,910	5·6	...	...	...	Slightly turbid
·007	3·74	3·746	37,140	18·0	...	...	...	Turbid; brownish green
·006	3·74	3·745	37,130	19·2	...	...	...	Clear
·003	2·31	2·312	22,800	54·1	...	...	...	Clear
·001	·88	·881	8,490	4·5	...	...	...	Clear

TABLE IX.—

Date of Receipt of Samples.	DESCRIPTION.	Temp. C.	Total Solid Impurity	Organic Carbon.	Organic Nitrogen.
1885.	WELL WATERS— <i>continued.</i>				
June 15th	8—14, Gough Road.....	...	149·80	...	very large
" "	20, Gough Road .....	...	118·40	...	very large
" "	38 and 40, Gough Road .....	...	115·80	...	large
" "	42 and 44, Gough Road.....	...	102·40	...	rather large
" 16th	253, Summer Lane .....	...	328·40	...	large
" 22nd	1 Court, Summer Road .....	...	72·80	...	...
" "	19 and 21, Summer Road .....	...	94·40	...	rather large
" "	2 Court, Summer Road .....	...	93·80	...	...
" "	3 Court, Summer Road .....	...	103·40	...	moderate
" "	138—141, Moseley Road .....	...	140·80	...	very large
" "	70 and 71, Moseley Street.....	...	266·40	...	...
" 29th	85 and 87, Alston Street .....	...	149·70	...	rather large
" "	1, Rose Mount Cottages, Icknield Port Road ... ..	...	71·80	...	...
" "	2, Rose Mount Cottages, Icknield Port Road ... ..	...	118·40	...	...
" "	3 and 4, Reservoir Retreat ... ..	...	105·80	...	...
" "	5 and 6, Reservoir Retreat ... ..	...	94·40	...	...
" "	9 and 10, Great Colmore Street ... ..	...	139·80	...	moderate
July 6th	19 and 20, Wordsworth Road .....	...	104·80	...	...
" "	83, Lancaster Street .....	...	193·40	...	...
" "	1 Court, Bordesley Park Road .....	...	99·80	...	...
" "	3 Court, ditto .....	...	96·60	...	...
" "	12 Court, ditto .....(1st pump)	...	67·20	...	large
" "	Ditto ditto .....(top pump)	...	86·60	...	very large
" 12th	181, Bristol Road, and Southfield, Sir Harry's Road .....	...	79·40	...	large
" 13th	62 and 63, Varna Road ... ..	...	73·80	...	...
" "	33, Varna Road .....	...	103·80	...	...
" "	68 and 70, Pershore Road .....	...	96·40	...	...
" "	1 Court, Miles Street .....	...	92·20	...	very large
" 17th	33, Wheeley's Road .....	...	60·60	...	large
" 20th	86, Emily Street .....	...	156·40	...	very excessive
" "	17—19, Leopold Street .....	...	169·80	...	moderate
" "	68 and 69, Moseley Street.....	...	172·80	...	...
" "	4—9, Stone Yard, Deritend .....	...	191·40	...	large
" "	St. Ann's Schools, Devon Street ... ..	...	57·20	...	rather large
" "	73, Cato Street .....	...	104·60	...	moderate
" 23rd	193—197, Lodge Road .....	...	96·40	...	...
" "	18 and 19, Talbot Street .....	...	104·80	...	...
" "	94—101, Bacchus Road .....	...	146·80	...	...
" "	494—496, Park Road .....	...	104·40	...	very large
" "	Stratford Terrace, Henley Street... ..	...	101·20	...	...
" "	75 and 77 Henley Street .....	...	53·60	...	rather large
" 27th	1 and 2, Phoenix Villas, Varna Road .....	...	147·40	...	moderate
" "	3, Phoenix Villas, Varna Road .....	...	148·80	...	large
" "	Phoenix Lodge, Varna Road .....	...	156·80	...	very large

(continued.)

Ammonia	Nitrogen as Nitrates and Nitrites.	Total Combined Nitrogen.	Previous Sewage or Animal Contami- nation. (Estimated)	Chlorine.	Hardness.			REMARKS.
					Tempo- rary.	Perma- nent.	Total.	
·005	1·43	1·434	14,020	21·1	...	...	...	Clear
·005	1·54	1·544	15,120	7·6	...	...	...	Clear
·003	2·53	2·532	25,000	20·6	...	...	...	Clear
·004	2·42	2·423	23,910	13·2	...	...	...	Clear
·004	5·50	5·503	54,710	26·0	...	...	...	Clear
·024	2·53	2·549	25,170	7·5	...	...	...	Clear
·005	3·08	3·084	30,520	7·6	...	...	...	Clear
·045	2·97	3·007	29,750	7·7	...	...	...	Clear
·002	4·84	4·841	48,090	7·5	...	...	...	Clear
·003	5·06	5·062	50,300	8·7	...	...	...	Clear
·280	4·40	4·630	45,980	42·8	...	...	...	Clear
·002	3·63	3·631	35,990	8·2	...	...	...	Turbid, thick sediment
·190	1·76	1·916	18,840	14·1	...	...	...	Slightly turbid
·035	5·50	5·529	54,970	10·4	...	...	...	Slightly turbid
·500	3·96	4·370	43,380	10·7	...	...	...	Clear
·400	5·61	5·940	59,080	12·4	...	...	...	Clear
·002	7·48	7·481	74,490	16·9	...	...	...	Clear
·650	·88	1·415	13,830	10·6	...	...	...	Clear
·090	1·32	1·394	13,620	57·1	...	...	...	Clear
·020	·99	1·006	9,740	7·8	...	...	...	Clear
·180	·88	·228	9,960	7·7	...	...	...	Clear
·002	·77	·771	7,390	3·0	...	...	...	Turbid
·002	1·32	1·321	12,890	6·7	...	...	...	Clear
·002	1·54	1·541	15,090	3·9	...	...	...	Clear
·125	·99	1·093	10,610	6·5	...	...	...	Clear
·190	·88	1·038	10,060	6·9	...	...	...	Clear
·030	2·86	2·885	28,530	6·0	...	...	...	Clear, residue brown
·003	·22	·222	1,900	8·1	...	...	...	Clear
·001	·11	·111	790	1·9	...	...	...	Clear
·003	2·09	2·092	20,600	10·3	...	...	...	Turbid; many particles, some of large size
·001	3·08	3·081	30,490	13·1	...	...	...	Clear
·080	2·86	2·926	28,940	20·8	...	...	...	Clear
·002	4·40	4·401	43,690	24·5	...	...	...	Clear
·003	·22	·222	1,900	3·1	...	...	...	Clear
·002	4·29	4·291	42,590	9·3	...	...	...	Clear
·040	3·30	3·333	33,010	8·9	...	...	...	Clear
·035	3·19	3·219	31,870	16·2	...	...	...	Clear
·125	4·40	4·503	44,710	19·1	...	...	...	Clear, residue brown
·003	4·29	4·292	42,600	6·8	...	...	...	Clear
·035	4·40	4·429	43,970	7·0	...	...	...	Clear
·002	·33	·331	2,990	1·7	...	...	...	Clear
·002	3·96	3·961	39,290	12·8	...	...	...	Clear
·001	4·07	4·071	40,390	13·9	...	...	...	Clear
·012	4·40	4·410	43,780	12·9	...	...	...	Clear

TABLE IX.—

Date of Receipt of Samples.	DESCRIPTION.	Temp. C.	Total Solid Impurity.	Organic Carbon.	Organic Nitrogen.
1885.	WELL WATERS—continued.				
July 27th	23 and 24, Varna Road .....	...	108.40	...	rather large
„ 28th	51 and 52, Varna Road .....	...	108.40	...	very large
„ „	74 and 75, Varna Road .....	...	175.60	...	...
Sept. „	30 and 31, Varna Road .....	...	84.40	...	very large
„ „	66 and 67, Varna Road .....	...	102.80	...	...
„ „	68 and 69, Varna Road .....	...	89.60	...	very large
„ „	70 and 71 Varna Road .....	...	86.40	...	large
„ „	27 and 29, Balsall Heath Road.....	...	97.20	...	very large
„ „	39 and 40, Spring Road .....	...	117.60	...	large
Oct. 5th	The Lodge, Calthorpe Park ....	...	91.40	...	very large
„ „	99, Bristol Road .....	...	74.80	...	rather large
„ „	103, Bristol Road .....	...	78.40	...	moderate
„ „	33, Wordsworth Road .....	...	64.60	...	large
„ „	1, Speedwell Road .....	...	62.80	...	...
„ „	178—181, Bromsgrove Street .....	...	151.60	...	...
„ 12th	26, Scholefield Street .....	...	151.40	...	very large
„ „	50, Inkerman Street .....	...	176.80	...	...
„ „	59, Inkerman Street .....	...	174.80	...	very large
„ „	213, Cromwell Street .....	...	136.40	...	very large
„ „	3—7, Bordesley Street .....	...	224.60	...	...
„ „	Back 7, Bartholomew Row, and back 20, Fox Street ... ..	...	67.60	...	very large
„ 13th	17—19, Ladywell Walk .....	...	206.40	...	...
„ „	102—106, Sherlock Street .....	...	194.80	...	...
„ „	30 and 31, Darwin Street .....	...	60.80	...	large
„ 19th	Milton Grove, Hooper Street (1st pump) .....	...	189.40	...	...
„ „	Milton Grove, Hooper Street (2nd pump) .....	...	122.80	...	large
„ „	113—116, Bacchus Road .....	...	64.80	...	large
„ „	97, Soho Road .....	...	130.40	...	very large
„ 24th	41½ and 42, Digbeth .....	...	195.40	...	...
„ „	17B, Moat Lane .....	...	20.80	...	rather small
„ „	6, Digbeth .....	...	38.80	...	small
„ „	7, Digbeth .....	...	80.60	...	moderate
„ 26th	13 and 14, Digbeth .....	...	26.40	...	small
„ „	24, Moat Lane .....	...	31.60	...	rather small
Nov. 3rd	200—203, Long Acre .....	...	189.40	...	...
„ „	124, Cuckoo Road .....	...	119.80	...	moderate
„ „	28—34, Cattell Grove .....	...	85.20	...	„
„ „	55 and 63, Cattell Grove .....	...	135.20	...	rather small
„ „	55 and 57, Ladypool Road .....	...	129.20	...	large
„ „	94 and 95, Main Street .....	...	133.80	...	moderate
„ 9th	7, Edgbaston Road .....	...	88.40	...	„
„ „	9, Edgbaston Road .....	...	73.80	...	„
„ „	239, Pershore Road .....	...	90.20	...	„
„ 17th	237, Pershore Road .....	...	94.60	...	large

(continued).

Ammonia	Nitrogen as Nitrates and Nitrites.	Total Combined Nitrogen.	Previous Sewage or Animal Contami- nation. (Estimated.)	Chlorine.	Hardness.			REMARKS.
					Tempo- rary.	Perma- nent.	Total.	
·003	2·97	2·972	29,400	8·7	...	...	...	Clear
·003	3·19	3·192	31,600	4·3	...	...	...	Clear
·220	4·29	4·471	44,390	10·2	...	...	...	Clear
·004	1·87	1·873	18,410	5·5	...	...	...	Clear
·050	·99	1·031	9,990	10·2	...	...	...	Clear
·003	1·21	1·212	11,800	5·0	...	...	...	Clear
·012	·44	·441	4,090	4·7	...	...	...	Clear
·008	1·10	1·106	10,740	6·8	...	...	...	Clear
·003	2·64	2·642	26,100	5·4	...	...	...	Clear
·004	·66	·663	6,310	5·3	...	...	...	Clear
·002	·22	·221	1,890	4·3	...	...	...	Clear
·001	none	none	0	7·5	...	...	...	Clear
·003	·66	·662	6,300	6·3	...	...	...	Clear
·040	1·76	1·793	17,610	6·2	...	...	...	Clear
·090	5·28	5·354	53,220	19·8	...	...	...	Clear
·003	3·52	3·522	34,900	16·5	...	...	...	Clear
·060	6·82	6·869	68,370	13·2	...	...	...	Clear
·005	2·86	2·864	28,320	10·5	...	...	...	Clear
·003	5·50	5·502	54,700	11·4	...	...	...	Clear
·014	7·92	7·932	79,000	29·1	...	...	...	Clear
·003	1·10	1·102	10,700	5·4	...	...	...	Clear
·300	7·92	8·167	81,350	26·0	...	...	...	Clear
·060	·88	·929	8,970	23·5	...	...	...	Clear
·001	1·10	1·101	10,690	7·1	...	...	...	Clear
1·000	13·53	14·353	143210	23·1	...	...	...	Clear
·002	5·28	5·281	52,490	10·2	...	...	...	Clear, residue brown.
·004	5·06	5·063	50,310	3·8	...	...	...	Clear
·005	3·96	3·964	39,320	8·7	...	...	...	Clear
·120	1·32	1·419	13,870	41·6	...	...	...	Clear
·001	none	none	0	1·5	...	...	...	Clear
·001	1·21	1·211	11,790	4·7	...	...	...	Clear
·002	2·20	2·201	21,690	14·7	...	...	...	Clear
·001	1·54	1·541	15,090	3·9	...	...	...	Clear
·020	·55	·566	5,340	3·2	...	...	...	Clear
1·400	8·80	9·983	99,510	16·0	...	...	...	Clear, residue brown
·003	4·62	4·622	45,900	8·5	...	...	...	Clear
·006	trace	trace	0	10·0	...	...	...	Turbid
·005	8·80	8·804	87,720	13·0	...	...	...	Clear
none	3·19	3·190	31,580	7·0	...	...	...	Clear
·002	6·27	6·271	62,390	10·6	...	...	...	Clear
·002	2·64	2·641	26,090	4·7	...	...	...	Clear
·001	1·21	1·211	11,790	2·3	...	...	...	Clear
·001	·55	·551	5,190	5·3	...	...	...	Clear
·001	·55	·551	5,190	5·4	...	...	...	Clear

TABLE IX.—

Date of Receipt of Samples.	DESCRIPTION.	Temp. C.	Total Solid Impurity.	Organic Carbon.	Organic Nitrogen.
1885.	WELL WATERS— <i>continued.</i>				
Nov. 17th	29, Pershore Road, and 42, Belgrave Road .....	...	108·20	...	...
" "	5 and 6, Little Edward Street .....	...	290·20	...	very large
" "	10, Great Barr Street.....	...	229·80	...	rather large
" "	85 and 87, Pershore Road .....	...	105·40	...	"
" "	109, Pershore Road .....	...	95·80	...	"
" "	158 and 160, Pershore Road .....	...	128·20	...	"
" 23rd	89 and 90, Victoria Street.....	...	101·40	...	very large
" "	91 and 92, Victoria Street.....	...	126·80	...	large
" "	93 and 94, Victoria Street.....	...	104·60	...	"
" "	95 and 96, Victoria Street .....	...	112·20	...	very large
" "	3, Belgrave Road.....	...	120·20	...	"
" "	87 and 88, Hurst Street.....	...	127·80	...	...
Dec. 2nd	5—9, Mill Lane .....	...	150·60	...	...
" 7th	59—65, Sherlock Street, and 141 to 143, Pershore Street .....	...	100·60	...	...
" "	27, Sherlock Street.....	...	203·40	...	very large
" "	Back 71, New Canal Street .....	...	120·20	...	large
" "	71 and 72, Lower Hurst Street ...	...	146·20	...	"
" "	25 and 26, Green Street .....	...	251·80	...	rather large
" "	2, Vine Place, Dart Street (Diph- theria) .....	...	147·80	...	...
" 14th	1 and 2, Laburnum Cottages, Hawkes Street .....	...	146·60	...	very large
" "	45 and 47, Hawkes Street .....	...	142·40	...	...
" "	57 and 59, Muntz Street.....	...	123·80	...	moderate
" "	55, Muntz Street .....	...	188·20	...	large
" "	61, Bartholomew Street.....	...	287·20	...	...
" "	64, Bartholomew Street .....	...	57·80	...	...
" 21st	241, Hagley Road .....	...	24·60	...	moderate
" "	245, Hagley Road .....	...	70·20	...	...
" "	158 and 160, Hagley Road .....	...	37·40	...	rather large
" "	22, Clarendon Road .....	...	14·20	...	moderate
" "	176, Bristol Street .....	...	107·60	...	large
" "	178 and 180, Bristol Street .....	...	157·80	...	moderate

(continue d.)

Ammonia	Nitrogen as Nitrates and Nitrites.	Total Combined Nitrogen.	Previous Sewage or Animal Contami- nation. (Estimated)	Chlorine.	Hardness.			REMARKS.
					Tempo- rary.	Perma- nent.	Total.	
·720	3·52	4·113	40,810	7·7	...	...	...	Clear
·002	6·93	6·931	68,990	45·7	...	...	...	Clear
·001	5·94	5·941	59,090	22·9	...	...	...	Clear
·003	2·75	2·752	27,200	5·3	...	...	...	Clear
·001	2·42	2·421	23,890	5·2	...	...	...	Clear
·003	1·10	1·102	10,700	23·0	...	...	...	Clear
·003	4·40	4·402	43,710	7·3	...	...	...	Clear
·001	2·53	2·531	24,990	6·9	...	...	...	Clear
·002	1·98	1·981	19,490	7·2	...	...	...	Clear
·001	1·98	1·981	19,490	7·2	...	...	...	Clear
·001	2·97	2·971	29,390	10·2	...	...	...	Clear
·030	4·18	4·205	41,730	19·1	...	...	...	Clear
·060	1·76	1·809	17,770	22·5	...	...	...	Clear
·160	2·20	2·332	23,000	11·0	...	...	...	Clear
·002	5·94	5·942	59,100	18·0	...	...	...	Clear
·027	4·84	4·862	48,300	13·8	...	...	...	Clear
·001	3·96	3·961	39,290	10·1	...	...	...	Clear
·001	12·54	12·541	125090	24·8	...	...	...	Clear
·025	4·84	4·860	48,280	7·1	...	...	...	Turbid
·002	6·16	6·161	61,290	11·3	...	...	...	Clear
·003	3·30	3·302	32,700	10·7	...	...	...	Clear
·040	7·70	7·733	77,010	9·6	...	...	...	Clear
·001	3·30	3·301	32,690	17·3	...	...	...	Clear
·020	·88	·896	8,640	34·5	...	...	...	Clear, residue brown
·040	12·54	12·572	125400	6·5	...	...	...	Clear, residue brown
·002	trace	trace	0	2·5	...	...	...	Clear
·120	2·42	2·518	25,860	8·1	...	...	...	Turbid
·002	1·10	1·101	10,690	2·2	...	...	...	Clear
·002	·33	·331	2,990	2·4	..	...	...	Clear
·001	3·96	3·961	39,290	9·2	...	...	...	Clear
·001	4·84	4·841	48,090	14·4	...	...	...	Clear

TABLE X.

RETURN FOR THE PERIOD 1ST JULY, 1884 TO 30TH JUNE, 1885, RESPECTING THE VACCINATION OF CHILDREN WHOSE BIRTHS WERE REGISTERED IN THE BOROUGH DURING THE SAID PERIOD.

PARISH.	Number of Births returned in the "Birth List Sheets" as Registered.	Number of these Births duly entered in Columns 10, 11, and 13 of the "Vaccination Register" (Birth List Sheets), viz. :					Number of these Births which remained unentered in the "Vaccination Register" on account (as shown by Report Book) of				Number of these Births remaining neither duly entered in the "Vaccination Register" (cols. 3, 4, 5, and 6 of this Return) nor accounted for in the "Report Book" (cols. 8, 9, and 10 of this Return).
		Col. 10. "Successfully Vaccinated."	Col. 11.		Col. 13. "Dead, Unvaccinated."	Postponement by Medical Certificate.	Removal to Districts the Vaccination Officer of which has been duly appraised.	Removal to places unknown or which cannot be reached; and cases not having been found.			
			"Insusceptible of Vaccination."	"Had Smallpox."							
1	2	3	4	5	6	8	9	10	11		
Birmingham ...	8,654	7,277	19	3	967	108	39	180	61		
Aston (within the Boro')	5,443	4,492	9	—	603	82	19	179	59		
Edgbaston (")	419	373	5	—	35	2	1	3	—		

Table of the Number of Deaths occurring in each Street in the Borough of
Birmingham during the Year, 1885.

STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases
A			Bath Street ...	8		Burbury Street ...	1	10
Abberley Street ...	1		Beachfield Road ...			Burlington Passage ...		
Abbey Street ...	4		Beach Street ...	1	6	Butler Street ...		4
Aberdeen Street ...	16		Beak Street ...		1	Butler Street South ...		4
A. B. Row ...			Bear Lane ...			Butlin Street ...		4
Ada Road ...		1	Beatrice Crescent ...					
Adam Street ...	4	18	Beaufort Road ...		3	C		
Adderley Street ...	2	8	Bedford Road ...		5	Calthorpe Road ...		4
Adelaide Street ...			Beechfield Road ...		4	Cambridge Crescent ...		2
Adelaide St., Deritend ...	3	7	Belgrave Road ...		4	Cambridge Street ...	1	2
Albany Road ...			Bell Barn Road ...	4	30	Camden Drive ...	2	
Albert Street, Deritend ...	4	7	Bellis Street ...		8	Camden Grove ...	1	
Albert Street, All Saints ...	1		Bell Street ...			Camden Street ...	5	41
Albert St., St. Martin's ...			Belmont Passage ...	1	5	Camp Hill ...		11
Albion Street ...	1	1	Belmont Row ...	2	7	Camp Street ...	1	4
Alcester Street ...	3	12	Benacre Street ...	2	15	Canal Street ...		4
Alexandra Road ...			Bennett's Hill ...			Cannon Street ...		
Alexandra Street ...	1	5	Berkley Street ...		3	Cape Lane ...		1
Alfred Street ...		2	Berners Street ...		3	Cape Street ...	1	2
Alcock Street ...	4	8	Beswick Street ...			Cardigan Street ...	1	13
Allen's Road ...		4	Betholom Row ...		1	Carlisle Street ...		1
Allesley Street ...		3	Birchall Street ...	2	5	Carlyle Road ...		
Allison Street ...		17	Bird Lane ...			Carnarvon Road ...		
All Saints' Road ...	1	2	Bishopgate Street ...	1	12	Caroline Street ...		3
All Saints' Street ...		2	Bishop St., St. Martin's ...	1	11	Carpenter Road ...		1
Alma Crescent ...	1	3	Bishop Street, St. Mary's ...			Carr's Lane ...		1
Alma Street ...			Bishop Street South ...		6	Cartland Road ...		1
Alston Street ...		7	Bissell Street ...	1	15	Carver Street ...	1	13
Ampton Road ...		1	Blake Lane ...			Castle Street, St. Martin's ...		1
Anderton Road ...		5	Blews Street ...	1	8	Castle Street, Deritend ...		
Anderton Street ...	1	9	Blews Street West ...		2	Cathcart Street ...	2	3
Andover Street ...			Bloomsbury ...			Cato Street ...	2	14
Angelina Street ...	4	22	Bloomsbury Street ...	2	31	Cato Street North ...	1	13
Argyle Street ...		2	Blucher Street ...	1	6	Cattell Road ...	4	26
Armoury Road ...			Bolton Road ...	1	16	Cattell Grove ...		2
Arsenal Street ...	1	2	Bolton Street ...	1	3	Cecil Street ...	2	18
Arthur Road ...		2	Bond Street ...			Centre Row ...		3
Arthur Street ...	1	30	Bordesley Green ...	1	13	Chad Road ...	1	
Ashford Street ...			Bordesley Green Road ...		3	Chandos Road ...		2
Ashted Row ...	1	19	Bordesley Park Road ...	2	27	Chapel House Street ...	1	4
Aston Brook Street ...	1	2	Bordesley Street ...	5	23	Chapel Street ...		5
Aston Road ...	7	27	Bow Street ...	3	5	Chapman Road ...		2
Aston Street ...	2	9	Bowyer Street ...		1	Charles Arthur Street ...	1	8
Asylum Road ...	2	3	Bracebridge Street ...	2	12	Charles Henry Street ...	4	27
Athole Street ...	1	1	Bradford Street ...	2	19	Charles Road ...		
Atlas Road ...	1	2	Brathwaite Road ...			Charlotte Road ...	1	
Auckland Road ...		8	Branston Street ...	1	7	Charlotte Street ...	1	2
Augusta Street ...		1	Brasshouse Passage ...			Chattaway Street ...		4
Augustus Road ...		3	Brass Street ...	1	4	Cheapside ...	3	39
Austin Street ...		3	Bread Lane ...			Cheatham Street ...	1	
Avenue Road ...			Bread Street, St. Paul's ...	2	7	Chequers Walk ...		2
			Bread St., St. Martin's ...			Cherry Street ...		
B			Brearley Street ...	6	48	Cherry Wood Lane ...	3	3
Bacchus Road ...		9	Brearley Street West ...			Chester St., Ladywood ...	1	17
Bagot Street ...	2	12	Brewery St., Deritend ...			Chester St., Duddleston ...		5
Bailey Street ...			Brewery St., St. Mary's ...		1	Cheston Road ...		
Baker Street ...	1	6	Brewery St., Duddleston ...			Christ Church Passage ...		
Balcon Street ...			Brickkiln Street ...			Church Road, Duddleston ...		3
Balsall Heath Road ...	1	8	Bridge Road ...	1		Church Road, Edgbaston ...		1
Banbury Street ...	1	1	Bridge Street, Nechells ...			Church Street ...		1
Barford Road ...		9	Bridge Street Duddleston ...			Clarendon Road ...		
Barford Street ...	5	25	Bridge Street St. Thomas ...		1	Clark Street ...	4	15
Barford Street South ...	11		Bridge Street West ...	5	40	Claverdon Street ...	3	6
Barker Street ...	2	7	Bristol Road ...		19	Claybrook Street ...		2
Barlow's Road ...		1	Bristol Street ...	2	12	Clement Street ...	5	1
Barn Street ...	5	15	Broad Street ...		21	Cleve Terrace ...		3
Barrack Street ...		1	Broomgrove Street ...	4	21	Clissold Street ...	1	3
Barr Street ...	19		Brookfield Road ...			Cliveland Street ...		6
Barr Street West ...	1	6	Brook Road ...			Coach Yard ...		
Bartholomew Row ...		3	Brook Street ...		2	Coleman Street ...	2	8
Bartholomew Street ...		6	Broom Street ...		1	Coleshill Street ...	1	8
Barwell Road ...		1	Brueton's Walk ...		2	College Street ...		3
Barwick Street ...			Buckingham Street ...	2	6	Colmore Row ...		4
Baskerville Passage ...			Buck Street ...		3	Commercial Street ...		
Baskerville Place ...			Bullock Road ...			Communication Row ...	2	3
Bath Passage ...			Bullock Street ...	4		Congreve Street ...		
Bath Row ...	1	6	Bull Ring ...		1	Constance Road ...		
			Bull Street ...	1	6	Constitution Hill ...	2	11

STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases
Conybere Street ...	1	18	Falconer Road ...	...	...	Green Street, All Saints'	...	2
Cook's Hill ...	...	...	Farm Road ...	...	...	Green's Village ...	...	3
Cook Street ...	...	3	Farm Street ...	2	38	Greenway Street ...	6	16
Cooksey Road ...	4	15	Farquhar Road ...	...	...	Grosvenor Row ...	...	3
Cope Street ...	2	6	Fawdry Street ...	...	...	Grosvenor Street ...	...	24
Coplow Street ...	1	5	Fazeley Street ...	...	7	Grosvenor Street West ...	...	5
Coralie Street ...	...	2	Fisher Street ...	4	10	Guest Street ...	...	...
Corporation Street ...	...	2	Fleet Street ...	4	14	Guildford Street ...	...	...
Cotton Row ...	...	...	Floodgate Street ...	5	10	Gullet, St. Mary's ...	...	...
Cotton Street ...	...	...	Florence Street ...	...	7	Gullet, Deritend ...	...	...
Coventry Road ...	4	39	Fordrough Lane ...	...	...	Gullet, St. Thomas's ...	...	...
Coventry Street ...	1	12	Fordrough Street ...	1	8	H	...	...
Cowper Street ...	1	4	Ford Street ...	1	17	Hagley Road ...	...	10
Cox Street ...	...	2	Forge Street ...	...	1	Halberton Street ...	...	1
Coxwell Road ...	1	3	Forster Street ...	...	2	Hall Hill Road ...	...	...
Crabtree Road ...	6	10	Foundry Road ...	...	2	Hall Street ...	2	3
Cranmore Street ...	...	2	Fowler Street ...	...	...	Hampton Street ...	1	11
Cregoe Street ...	3	15	Fox Street ...	...	4	Hampton Row ...	...	3
Crescent ...	...	26	Francis Road ...	...	2	Handsworth New Road ...	...	2
Crescent Wharf ...	...	...	Francis Street ...	1	24	Hanley Street ...	2	9
Crompton Road ...	...	1	Frankfort Street ...	2	15	Hanover Street ...	...	5
Cromwell Street ...	4	41	Franklin Street ...	1	4	Harborne Road ...	...	2
Crooked Lane ...	...	...	Frank Street ...	...	2	Harding St. St. George's	2	10
Cross Street ...	...	...	Frederick Road ...	...	5	Harding St., All Saints'	...	...
Cuckoo Road ...	1	6	Frederick Street ...	1	5	Harford Street ...	1	4
Cumberland Street ...	...	1	Freeman Road ...	1	6	Harrison's Road ...	...	1
Curzon Street ...	1	6	Freeman Street ...	...	1	Hatchett Street ...	...	15
Cuthbert Road ...	...	1	Freeth Street ...	5	12	Hawkes Street ...	1	5
			Frison Street ...	2	19	Heath Mill Lane ...	7	12
D						Heath Street ...	...	24
Dale End ...	2	2	Galton Street ...	...	2	Heath Street South ...	...	1
Dart Street ...	...	...	Garbett Street ...	3	16	Heaton Street ...	1	13
Dartmouth Street ...	6	22	Garrison Lane ...	5	29	Helena Street ...	...	1
Darwin Street ...	3	29	Garrison Street ...	1	12	Heneage Street ...	2	31
Dawson Street ...	...	...	Gas Street ...	...	1	Henley Street ...	1	9
Dean Street ...	...	2	Geach Street ...	...	7	Henn Street ...	...	...
Denbigh Street ...	...	1	Gee Street ...	...	2	Henn's Walk ...	...	...
Dearman Road ...	...	2	Gem Street ...	2	2	Henrietta Street ...	...	2
Derby Street ...	2	4	George Road ...	...	3	Henry Street ...	...	5
Devon Street ...	...	2	George Street, St. Paul's	...	2	Herbert Road ...	1	19
Devonshire Street ...	4	12	George Street, Nechells	2	5	Hermitage Road ...	...	1
Digbeth ...	...	1	George Street West ...	2	9	Hickman Road ...	...	2
Digby Street ...	1	3	Gibb Street ...	...	1	Hick Street ...	1	9
Dixon Road ...	...	1	Gillott Road ...	...	1	Highfield Road ...	...	2
Doe Street ...	...	2	Gladstone Road ...	1	6	Highgate Road ...	...	3
Dolman Street ...	...	6	Glebe Passage ...	...	...	Highgate Place ...	...	2
Dolobran Road ...	1	9	Glebe Street ...	...	3	Highgate Street ...	2	18
Duchess Road ...	...	2	Gloucester Street ...	...	...	High Park Street ...	...	7
Duddleston Mill Road	...	6	Glover's Road ...	1	3	High Street ...	...	3
Duddleston Row ...	...	5	Glover's Street ...	3	7	High Street, Bordesley	1	1
Dudley Road ...	19	...	Godwin Street ...	...	3	High Street, Deritend	1	17
Dudley Street ...	...	1	Golden Hillock Road ...	...	2	Hill Street ...	2	4
Dugdale Street ...	10	...	Gooch Street ...	3	20	Hinckley Street ...	...	2
Duke Street ...	1	7	Goode Street ...	...	2	Hingston Street ...	3	21
Dymoke Street ...	3	18	Good Knave's End ...	...	...	Hob Moor Road ...	...	...
			Goodrick Street ...	1	2	Hockley Hill ...	...	13
E			Gopsall Street ...	...	4	Hockley Pool Road ...	...	...
Eastern Road ...	...	...	Gosta Green ...	1	5	Hockley Street ...	1	10
Easy Row ...	...	1	Gough Road ...	2	4	Holborn Hill ...	...	7
Edgbaston Road ...	...	...	Gough Street ...	4	10	Holland Street ...	...	2
Edgbaston Street ...	6	...	Grace Road ...	2	3	Holiday Street ...	...	11
Edmund Street ...	...	...	Grafton Road ...	...	2	Hollier Street ...	...	1
Edward Road ...	...	...	Graham Street ...	9	...	Holloway Head ...	1	13
Edward Street ...	3	14	Grange Road ...	1	7	Holly Road ...	...	...
Elkington Street ...	...	...	Grantham Road ...	...	5	Holt Street ...	...	14
Ellen Street ...	2	9	Grant Street ...	1	4	Hooper Street ...	...	3
Ellis Street ...	1	6	Granville Street ...	3	10	Hope St. (St. Martin's)	3	27
Elvetham Road ...	1	2	Great Barr Street ...	3	18	Hope St. (All Saints')	...	...
Emily Street ...	4	20	Great Brook Street ...	8	21	Horse Fair ...	...	3
Emmeline Street ...	...	...	Great Charles Street ...	...	3	Hospital Street ...	5	57
Enfield Road ...	...	1	Great Colmore Street ...	6	28	Howard Place ...	...	...
Engine Street ...	...	...	Great Francis Street ...	5	27	Howard Street ...	...	4
Erasmus Road ...	2	5	Great Hampton Row ...	3	19	Howe Street ...	1	12
Ernest Street ...	...	...	Great Hampton Street ...	2	9	Hubert Road ...	...	...
Erskine Street ...	1	3	Great King Street ...	4	19	Hubert Street ...	...	...
Essex Street ...	3	12	Great Lister Street ...	5	34	Humpage Road ...	...	...
Essington Street ...	...	11	Great Russell Street ...	7	33	Hunter's Lane ...	...	...
Eversley Road ...	...	1	Great Tindal Street ...	1	5	Hunter's Vale ...	...	...
Exeter Row ...	...	...	Greenfield Crescent ...	...	...	Hurst Street ...	2	17
Kyre Street ...	...	4	Green Lane ...	...	16	Hutton Street ...	...	2
			Green's Court ...	...	...	Hyde Road ...	1	6
F			Green Street, Deritend	1	...	Hylton Street ...	...	2
Factory Road ...	...	...				

STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases
I			Lennox Street ...	1	13	Mill Lane ...		3
Icknield Port Road ...	2	33	Leopold Street ...	1	11	Mill Street ...		1
Icknield Square ...	2	12	Lilly Green ...		5	Milton Street ...		10
Icknield Street ...	3	22	Lingard Street ...	1	5	Milward Street ...	3	4
Inge Street ...	3	12	Lionel Street ...		10	Minories ...		
Ingleby Street ...	1	7	Lister Street ...		7	Moat Lane ...		1
Inkerman Street ...	2	5	Little Ann Street ...		6	Moat Row ...		2
Irving Street ...	6	30	Little Barr Street ...		5	Moillett Street ...	2	3
Islington Row ...		4	Little Bow Street ...		1	Moland Street ...		12
Ivy Lane ...	5	4	Little Broom Street ...			Mole Street ...	2	7
J			Little Cannon Street ...			Mona Road ...		
Jamaica Row ...			Little Cherry Street ...		2	Monmouth Street ...		
James Street ...			Little Edward Street ...	2	3	Montague Road ...		1
James Turner Street ...	7		Little Francis Street ...		1	Montague Street ...	1	4
James Watt Street ...	1		Little Green Lane ...	6	18	Montgomery Street ...		4
Jenkins Street ...	1		Little Hill Street ...			Montpellier Street ...		1
Jennens Row ...	1		Little King Street ...		4	Monument Road ...	4	26
John Bright Street ...	3		Little Shadwell Street ...		1	Moore's Row ...		
Johnson Street ...	3		Liverpool Street ...		1	Moorsom Street ...		2
Johnstone Street ...	1		Livery Street ...	3	6	Moor Street ...	1	6
K			Lloyd Street ...			Moreton Street ...		4
Keeley Street ...		2	Lodge Road ...	2	17	Morville Street ...		18
Kelynge Street ...	2	9	Lombard Street ...		11	Moseley Road ...	4	8
Kendal Road ...		2	London 'Prentice Street ...			Moseley Street ...	2	26
Kent Street ...		3	Long Acre ...	1	23	Mott Street ...		5
Kent Street North ...	2	6	Longmore Street ...		2	Mountfield Road ...		1
Kenyon Street ...		7	Long Street ...	1	11	Mount Pleasant ...		4
Key Hill ...		13	Lord Street ...		5	Mount Street, Deritend ...	1	3
King Alfred's Place ...	1	2	Louisa Street ...			Mount St., Winson Green ...		2
King Edward's Place ...		1	Loveday Street ...		5	Mount Street, Nechells ...		6
King Edward's Road ...	1	24	Love Lane ...	1	2	Musgrave Road ...	1	
Kingscote Road ...		1	Lower Dartmouth Street ...	2	3	Muntz Street ...		17
Kingston Road ...		5	Lower Darwin Street ...		1	N		
King Street ...		3	Lower Dean Street ...			Navigation Street ...	3	7
Kyott's Lake Road ...		1	Lower Essex Street ...	2	7	Nechells Park Road ...	3	31
Kyrwick's Lane ...	2	13	Lower Fazeley Street ...	3	2	Nechells Place ...	1	4
L			Lower Henry Street ...			Needham Street ...		
Ladypool Road ...	1	6	Lower Hurst Street ...	1	12	Needless Alley ...		
Ladywell Passage ...		1	Lower Hurst Street East ...		2	Nelson Street ...		6
Ladywell Walk ...		3	Lower Lawley Street ...			Nelson Street South ...		16
Ladywood Road ...	2	27	Lower Loveday Street ...	1		Nelson Street West ...	4	14
Ladywood Grove ...		1	Lower Pershore Street ...			New Bartholomew St. ...		1
Lancaster Street ...	1	13	Lower Priory ...			New Bond Street ...		
Lander Street ...			Lower Russell Street ...			New Bridge Street ...		
Lander Street ...		1	Lowes Street ...	3		New Canal Street ...	4	17
Langley Road ...	1		Lower Temple Street ...		1	New Church Street ...		
Lansdowne Street ...		3	Lower Tower Street ...	4	18	Newdegate Street ...		
Larches Street ...	1	9	Lower Trinity Street ...	2	4	New Edmund Street ...		
Latimer Street ...	2	6	Lower Windsor Street ...			New England ...		
Latimer Street South ...	2	22	Loxton Street ...		4	New Hall Hill ...	1	11
Lawden Road ...		1	Ludgate Hill ...		6	New Hall Street ...		8
Lawley Street ...	5	12	Ludgate Hill Passage ...			New Inkleys ...		
Lawrence Street ...	1	9	Lupin Street ...	1	13	New John Street ...	1	15
Lease Lane ...		3	M			New John Street West ...	11	44
Ledsam Street ...		20	Macdonald Street ...	1	8	New Market Street ...		2
Lee Bank Road ...	1	19	Main Street ...	2	7	New Meeting Street ...		
Lee Crescent ...		3	Malvern Hill Road ...	1	3	New Spring Street ...	2	10
Lee Mount ...		3	Manchester Street ...	2	2	New Street ...		6
Lee Street ...		1	Manor Road ...			New Summer Street ...	5	32
Lees Street ...			Market Street ...	1	1	Newtown Street ...	2	10
Legge Lane ...		4	Mark Lane ...	1	2	Newtown Row ...	7	29
Legge Street ...		6	Marroway Street ...			Nile Street ...		
Lench Street ...		11	Marshall Street ...	1	10	Nineveh Road ...		
			Marshall Street South ...	2	1	Noel Road ...		1
			Mary Ann Street ...		2	Norfolk Road ...		1
			Mary Street ...			Norfolk Street ...	2	4
			Masshouse Lane, St. Mtns ...		2	Norman Street ...	1	9
			Masshouse Lane, Edgbsn ...			Northampton Street ...		
			Meeting House Yard ...			Northbrook Street ...		6
			Meriden Street ...	2	8	Northumberland Street ...		7
			Metchley Lane ...		3	North Warwick Street ...		
			Metchley Park Road ...			Northwood Street ...	1	13
			Miles Street ...		6	North Street ...		
			Milk Street ...	3	10	Norton Street ...		2
			Miller Street ...	1	8	Norwood Road ...		2
						Nova Scotia Street ...		9
						Nursery Road ...		

STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases
O			R					
Oakley Road ...	1	1	Radnor Street...			Shadwell Street ...	1	4
Old Cross Street ...	1	8	Raglan Road ...			Shakespeare Road ...	6	21
Old Meeting Street ...		1	Railway Ter., Duddleston	2	8	Sheepcote Lane ...		3
Old Square ...			Railway Ter., Nechells		4	Sheepcote Street ...		7
Oliver Road ...		1	Rann Street ...		9	Sheep Street ...	1	14
Oliver Street ...	9		Ratcliff Place ...			Sherborne Street ...	1	26
Oozells Street ...	1		Ratcliff Street ...			Sherlock Street ...	2	40
Oozells Street North ...	1	2	Ravenhurst Street ...	1	7	Shutt Lane ...		
Orford Road ...	1		Rawlins Street ...		4	Sidney Road ...		
Ormond Street ...	1	6	Rea Street ...	3	13	Silver Street ...		
Osler Street ...	1	17	Rea Street South ...	1	6	Sir Harry's Road ...		2
Oughton Place ...		3	Regent Parade ...		1	Skinner Lane ...	2	7
Outlet Road ...			Regent Park Road ...		2	Skinner Street ...		4
Owen Street ...	6	11	Regent Place ...		3	Slaney Street ...		8
Oxford Street ...	1	10	Regent Row ...		3	Slough Lane ...		1
Oxygen Street...		5	Regent Street ...			Smallbrook Street ...		5
			Reservoir Retreat ...		1	Smithfield Passage ...		3
			Reservoir Road ...		8	Smithfield Street ...		2
			Richard St., Nechells ...	1	10	Smith Street, St George's	3	21
			Richard St., St. Paul's			Smith Street, Duddleston		3
			Richmond Hill Road ...	1		Snape Street ...		
			River Street ...	1	1	Snow Hill ...		15
			Robert Road ...	1	1	Soho Road ...		4
			Rocky Lane ...	4	8	Somerset Road ...		
			Rodway Street ...		2	Somerset Street ...	1	1
			Rope Walk ...		2	South Road ...		8
			Rosalie Street ...		3	Spark Street ...	1	3
			Rotton Park Road ...			Speaking Stile Walk ...		1
Paddington Street ...		8	Rotton Park Street ...			Speedwell Road ...		2
Pakenham Road ...			Rowland Street ...	1	3	Spencer Street ...	1	5
Palmer Street ...	7	8	Rupert Street ...	4	11	Spiceal Street ...		1
Parade ...		2	Russell Street ...		3	Spon Terrace ...		
Paradise Street ...		3	Ruston Street ...	1	6	Spooner Street ...	1	4
Parker Street ...		6	Ruston Street North ...	2	12	Springfield Street ...	1	7
Park Lane ...		7	Rutland Road ...		3	Spring Hill ...		7
Park Road, All Saints'	3	35	Ryland Road ...		5	Spring Hill Passage ...		2
Park Road, Edgbaston			Ryland Road, Deritend		2	Spring Road ...		2
Park Street ...	1	6	Ryland St., Ladywood	1	5	Spring Street ...		3
Parliament Street ...	1	6	Ryland Street North ...			Spring Vale ...		2
Paxton Road ...		3				Stafford Street ...		9
Pebble Mill Road ...						Staniforth Street ...		11
Peel Street ...		18				Stanley Road ...		1
Penn Street, Deritend ...			S			Stanhope Street ...	1	6
Penn Street, Duddleston			Salop Street ...	1	2	Stannore Road ...		2
Pershore Road ...	1	11	Saltley Road ...	2	12	Station Road ...		
Pershore Street ...	4	7	Saltley Street ...	1	3	Stella Street ...		2
Phillip St., Market Hall			Sampson Road ...		6	Steelhouse Lane ...		19
Pickford Street ...	1	6	Sampson Road North ...		1	Stephenson Place ...		
Piddock Street ...		3	Sandon Road ...			Stephenson Street ...		
Pigott Street ...		9	Sand Pits ...	1	6	Steward Street ...		14
Pinfold Street ...			Sand Street ...	1	1	Stirling Road ...		2
Pitney Street ...			Sandy Lane ...	1	15	Stoke Street ...		10
Pitsford Street ...	1	3	Sarah Street ...			Stone Yard ...		
Plough & Harrow Road			St. Andrew's Road ...	3	14	Stoney Lane ...		3
Pope Street ...	2	22	St. Clement's Road ...		2	Stour Street ...	1	5
Poplar Avenue ...		1	St. George's Crescent ...			Stratford Place ...		1
Porchester Street ...			St. George's Street ...	4	14	Stratford Road ...	2	7
Port Hope Road ...			St. George's Place ...			Stratford Street ...		4
Portland Road ...		2	St. George's Terrace ...			Stuart Street ...	1	3
Potter Street ...			St. James' Place ...	3	4	Suffolk Street ...	1	12
Poultry ...			St. James' Road ...			Summerfield Crescent ...		
Powell Street ...	1	3	St. James' Street ...		3	Summer Hill ...	1	9
Prescott Street ...	1	9	St. Luke's Road ...	3	7	Summer Hill Road ...		
Price Street ...	3	5	St. Mark's Road ...	3	8	Summer Hill Street ...		9
Priestley Road ...			St. Mark's Street West ...	1	6	Summer Hill Terrace ...	2	9
Primrose Hill ...			St. Martin's Lane ...			Summer Lane ...	4	30
Princes Row ...		3	St. Martin's Place ...		1	Summer Row ...		2
Princes Street ...	1		St. Martin's Row ...			Summer Road ...	3	16
Princess Road ...		4	St. Martin's Street ...		10	Summer Street ...		
Princip Street ...		6	St. Mary's Row ...	1	3	Sun Street ...	3	8
Priory Road ...			St. Mary's Street ...		1	Sun Street West ...	1	4
Pritchett's Lane ...			St. Oswald's Road ...			Sutton Street ...		5
Pritchett Street ...	2	16	St. Paul's Square ...		2	Swallow Street ...	1	4
Proctor Street ...		6	St. Peter's Place ...			Swan Passage ...		
Prospect Row ...		2	St. Philip's Church Yard		1	Sydney Road ...	1	1
			St. Stephen's Street ...					
			St. Vincent Street ...	2	22	T		
			Scholefield Street ...	4	20	Talbot Street ...	1	9
			Scotland Passage ...			Talfourd Street ...	2	4
			Scotland Street ...			Tanter Street ...		
			Scott Street ...		2	Taylor Street ...		5
			Seymour Street ...		1	Temple Field Street	1	2
						Temple Row ...		
Q								
Queen Street ...								

STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases
Temple Row West ...						Worcester Wharf ...		1
Temple Street... ..	1		W			Wordsworth Road ...	1	2
Tenby Street	5		Walter Street	1		Wrentham Street ...	1	18
Tenby Street North ...	7		Ward Street	3	9	Wright Street		2
Tennant Street	4	15	Warner Street... ..	1	7	Wrottesley Street ...		
Theodore Street	11		Warstone Lane		17	Wyndcliffe Road		1
Theresa Road	4		Warstone Parade			Wyndham Road		
Thimble Mill Lane		9	Warwick Passage			Wynn Street	1	12
Thomas St., St. Mary's			Warwick Street	2	14			
Thomas Street, Deritend	2	4	Washington Street ...		3	X		
Thorp Street	1	3	Waterloo Street		2			
Tillingham Street		3	Water Street			Y		
Tindal Street		9	Waterworks Road	2	9			
Tonk Street			Watery Lane	2	24			
Tower Street	4	21	Weaman Row			Yardley Road		
Trafalgar Road			Weaman Street		12	Yew Tree Road		
Trent Street		10	Wellesley Street		3	York Passage		
Trinity Terrace			Wellington Passage ...			York Road		5
Turner Street	1	6	Wellington Road		5	York Street		1
Tyudall Street... ..	2	6	Wellington St. W'm's'n Gr	2	11			
U			Wellington St., Icknield Sq.		4	Z		
Unett Street	4	21	Well Lane					
Union Passage		2	Well Street	1	18	ADDENDA.		
Union Street		2	Westbourne Road		1			
Union Terrace			Western Road... ..			Birmingham and War-		
Upper Dean Street		1	Westfield Road			wick Canal		2
Upper Gough Street ...	1	2	Westley Street	1	3			
Upper Highgate Street ...	1	9	Weston Street... ..	1	3	Birmingham and Faze-		
Upper Hockley Street... ..		1	Wharf Lane		2	ley Canal		3
Upper Hospital Street... ..			Wharf St., All Saints ...		4	Old Birmingham Canal		8
Upper Marshall Street... ..		2	Wharf St., St. Thomas's			Birmingham and Wor-		
Upper Mill Lane			Wharf St., Duddleston ...			cester Canal		1
Upper Priory	1	3	Wharton Street			Bordesley Railway Sta-		
Upper Ryland Road	2	4	Wheeler Street	1	18	tion		1
Upper Tower Street		1	Wheeler's Lane		6	Snow Hill Railway		
Upper Trinity Street	2	11	Wheely's Road		3	Station		1
Upper Windsor Street... ..			White Lion Passage			New Street Railway		
			White Road	2	10	Street		1
V			Whitmore Road		6	Hockley Railway Station		1
Varna Road		15	Whitmore Street	2	10	London & North West-		
Vaughton Street	4	10	Whittall Street		5	ern Railway		1
Vaughton Street South ...		1	Wiggin Street... ..			Soho Wharf		1
Vauxhall Grove			William Edward Street ...	1	5			
Vauxhall Road	2	17	William Henry Street ...		2			
Vauxhall Street		6	William St., St. Thomas'	1	20	AT INSTITUTIONS.		
Vere Street		14	William Street, Deritend ...		1	General Hospital	9	271
Viaduct Street... ..			William Street North ...	1	3	Queen's Hospital	6	176
Vicarage Road			Willis Street	1	14	Children's Hospital ...	15	57
Victoria Grove			Willow Avenue		1	Workhouse	17	616
Victoria Street	2	6	Wilton Street	2	3	Asylum		68
Villa Street			Windmill Street	1	2	Gaol		3
Villiers Street		2	Windsor Street	2	26	Borough Hospital	21	
Vine Street			Winson Green Road		11	Homeopathic Hospital	1	16
Vittoria Street... ..	1	4	Witton Street... ..	1	6	Eye Hospital		1
Vyse Street	1	7	Woodbourne Road			Orthopaedic Hospital ..		1
			Woodcock Street		8	General Dispensary ...		1
			Wood St., St. Thomas'					
			Wood Street, Ladywood ...	1	2			
			Worcester Street		1	TOTALS	876	7280

Grand Total ... 8,156

1885

DEATH RATE PER
1000 PER ANN
AND
AV. DEATH
AGE IN YEARS

TOTAL DEATH RATE FROM ALL CAUSES

AVERAGE AGE AT DEATH

JANUARY.				FEBRUARY.				MARCH.				APRIL.				MAY.					JUNE			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	

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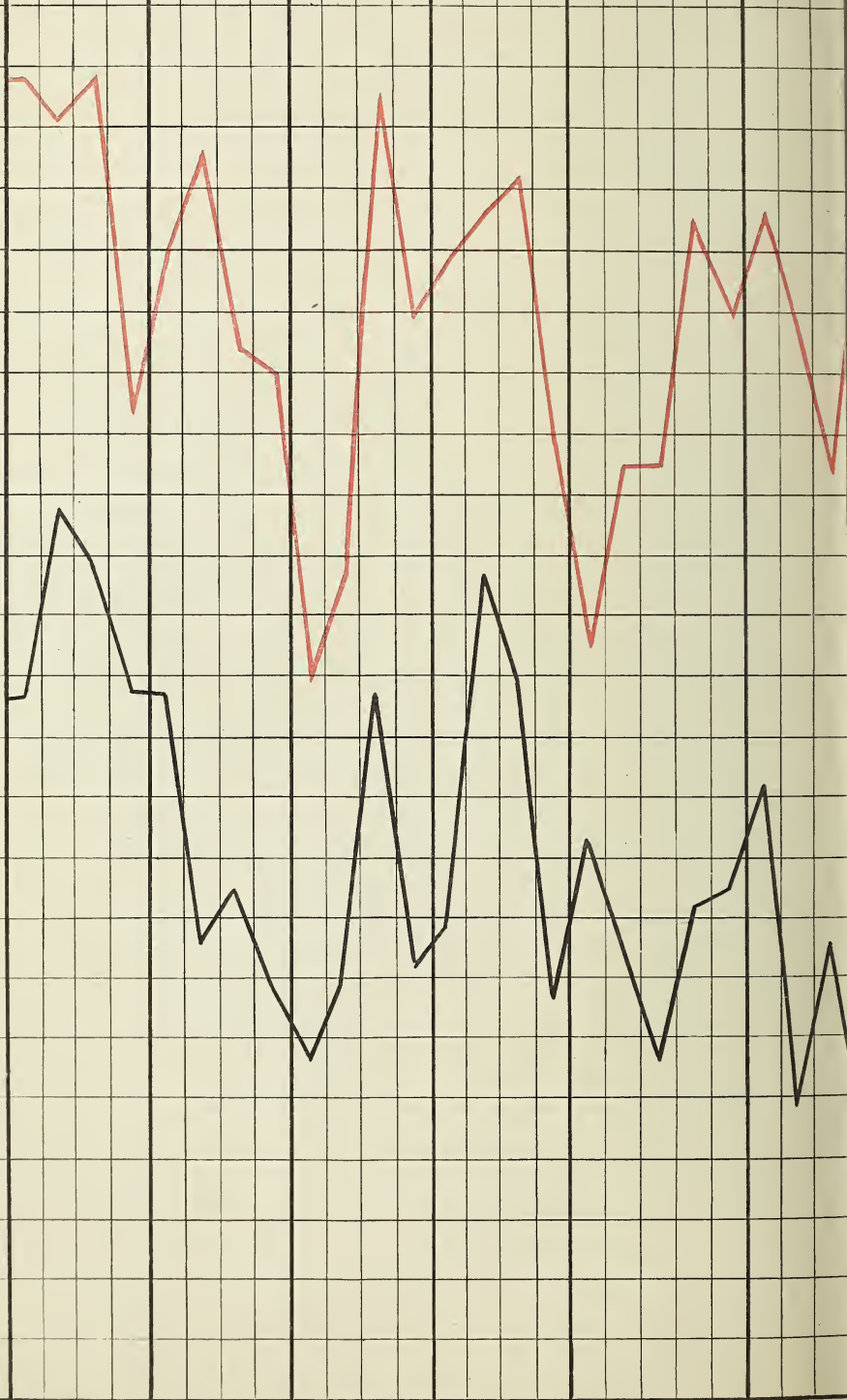
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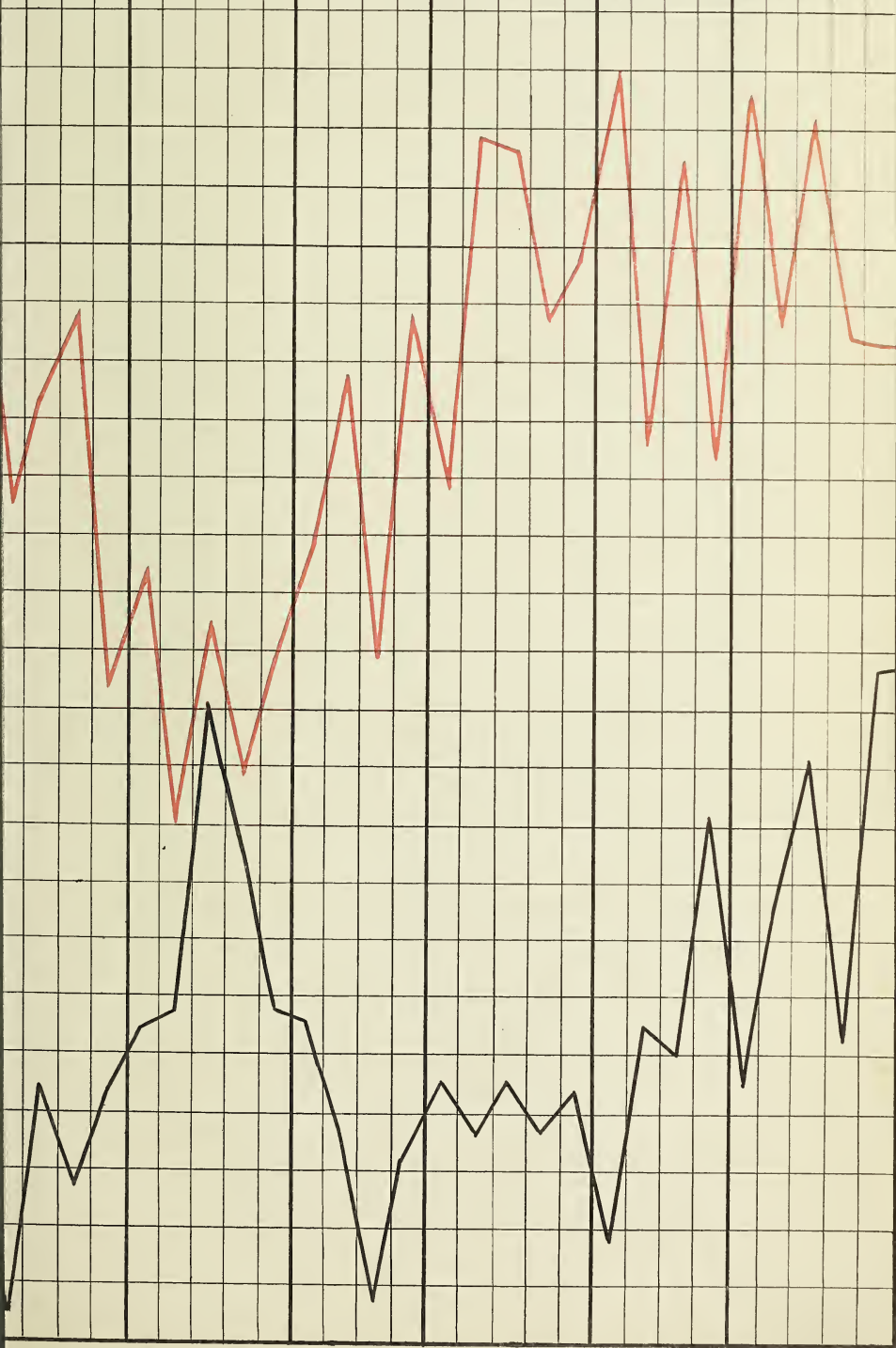
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SHOWN IN WEEKLY PERIODS THUS _____

JULY.				AUGUST.				SEPTEMBER.				OCTOBER.				NOVEMBER				DECEMBER.						
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52



MAP OF THE BOROUGH OF BIRMINGHAM, AS IN 1880.

NOTE. THE RED SPOTS REPRESENT THE NUMBER OF DEATHS (31) FROM SCARLET FEVER IN 1885.

" BLUE CROSSES " " (119) " MEASLES
" " " (67) " TYPHOID FEVER "



REPORT
ON
ADULTERATION.

BOROUGH ANALYST'S LABORATORY,
THE COUNCIL HOUSE, BIRMINGHAM,
April 9th, 1886.
TO THE HEALTH COMMITTEE.

MR. CHAIRMAN AND GENTLEMEN,

I beg to report that during the past year 914 samples of food, drink, or drugs have been purchased by the Inspector of Nuisances and handed over to me for analysis.

No sample has been submitted by a private purchaser. The nature of each article, and the analytical results will be found in the annexed statement:—

NO.	DATE.	ARTICLE.	REMARKS.
1—	Jan. 5th	... .. Vinegar	Genuine.
2—	„ 5th	..... Vinegar	Genuine.
3—	„ 5th	..... Vinegar	Genuine.
4—	„ 5th	..... Vinegar	Genuine.
5—	„ 5th	..... Vinegar	Genuine.
6—	„ 5th	..... Vinegar	Genuine.
7—	„ 5th	..... Flour ..	Genuine.
8—	„ 5th	..... Arrowroot	Genuine.
9—	„ 5th	..... Flour	Genuine.
10—	„ 5th	..... Arrowroot	Genuine.
11—	„ 5th	..... Flour	Genuine.
12—	„ 5th	..... Flour	Genuine.
13—	„ 5th	..... Arrowroot	Genuine.
14—	„ 5th	..... Flour	Genuine.
15—	„ 5th	..... Flour	Genuine.
16—	„ 12th	..... Oatmeal	Genuine.
17—	„ 12th	..... Oatmeal	Genuine.
18—	„ 12th	..... Oatmeal	Genuine.
19—	„ 12th	..... Oatmeal	Genuine.
20—	„ 12th	..... Oatmeal	Genuine.
21—	„ 12th	.. ... Oatmeal	Genuine.
22—	„ 12th	..... Bread	Genuine.
23—	„ 12th	..... Bread	Genuine.
24—	„ 12th	..... Bread	Genuine.
25—	„ 12th	..... Bread	Genuine.
26—	„ 12th	..... Bread	Genuine.

NO.	DATE.	ARTICLE.	REMARKS
27—	Jan. 12th	Bread	Genuine.
28—	„ 14th	Milk	Genuine.
29—	„ 14th	Milk	Genuine.
30—	„ 14th	Milk	Genuine.
31—	„ 14th	Milk	Adulterated, with 15% of water. Cautioned by Health Sub-Committee.
32—	„ 14th	Milk	Genuine.
33—	„ 14th	Milk	Genuine.
34—	„ 17th	Flowers of Sulphur	Genuine.
35—	„ 17th	Flowers of Sulphur	Adulterated with 67% of Sulphate of Lime.
36—	„ 17th	Magnesia	Genuine.
37—	„ 17th	Flowers of Sulphur	Genuine.
38—	„ 17th	Magnesia	Genuine.
39—	„ 17th	Magnesia	Genuine.
40—	„ 17th	Magnesia	Genuine.
41—	„ 17th	Flowers of Sulphur	Adulterated with 66% of Sulphate of Lime.
42—	„ 17th	Flowers of Sulphur	Genuine.
43—	„ 17th	Magnesia	Genuine (nearly).
44—	„ 17th	Flowers of Sulphur	Genuine.
45—	„ 17th	Magnesia	Genuine.
46—	„ 22nd	Flour	Genuine.
47—	„ 22nd	Flour	Genuine.
48—	„ 22nd	Flour	Genuine.
49—	„ 22nd	Flour	Genuine.
50—	„ 22nd	Flour	Genuine.
51—	„ 22nd	Flour	Genuine.
52—	„ 22nd	Milk	Adulterated with 14% of water. Fined 20s. and costs.
53—	„ 22nd	Milk	Adulterated with 11% of water. Fined 10s. and costs.
54—	„ 22nd	Milk	Genuine.
55—	„ 22nd	Milk	Adulterated with 5% of water and deprived of 40% of its cream. Fined 10s. and costs.
56—	„ 22nd	Milk	Genuine.
57—	„ 22nd	Milk	Genuine.
58—	„ 29th	Black Pepper	Adulterated with 3% of mineral matter.
59—	„ 29th	Cocoa	Contained about 50% of sugar and starch.
60—	„ 29th	Black Pepper	Adulterated with 2% of mineral matter.
61—	„ 29th	Black Pepper	Adulterated with 6% of mineral matter.
62—	„ 29th	Black Pepper	Adulterated with 5% of mineral matter.
63—	„ 29th	Black Pepper	Adulterated with 5% of mineral matter.
64—	„ 29th	Black Pepper	Adulterated with 2% of mineral matter.
65—	„ 29th	Milk	Genuine.
66—	„ 29th	Milk	Genuine.
67—	„ 29th	Milk	Genuine.
68—	„ 29th	Milk	Genuine.
69—	„ 29th	Milk	Genuine.
70—	„ 29th	Milk	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
71—	Jan. 29th	Cocoa	Contained about 60% of sugar and starch.
72—	„ 29th	Cocoa	Contained about 10% of sugar and starch.
73—	„ 29th	Cocoa	Contained about 50% of sugar and starch.
74—	„ 29th	Cocoa	Contained about 60% of sugar and starch.
75—	Feb. 2nd	Vinegar	Genuine.
76—	„ 2nd	Vinegar	Genuine.
77—	„ 2nd	Vinegar	Genuine.
78—	„ 2nd	Vinegar	Genuine.
79—	„ 2nd	Vinegar	Genuine.
80—	„ 2nd	Vinegar	Genuine.
81—	„ 2nd	Ale	Genuine.
82—	„ 2nd	Ale	Genuine.
83—	„ 2nd	Ale	Genuine.
84—	„ 2nd	Ale	Genuine.
85—	„ 2nd	Ale	Genuine.
86—	„ 2nd	Ale	Genuine.
87—	„ 3rd	Milk	Adulterated with 23% of water. Fined 10s. and costs.
88—	„ 3rd	Milk	Adulterated with 14% of water. Fined 10s. and costs.
89—	„ 3rd	Milk	Genuine.
90—	„ 3rd	Milk	Genuine.
91—	„ 3rd	Milk	Genuine.
92—	„ 3rd	Milk	Genuine.
93—	„ 4th	Milk	Deprived of 58 % of its cream.
94—	„ 5th	Butter..	Genuine.
95—	„ 5th	Butter.....	Butterine. Cautioned by Chairman of Health Committee.
96—	„ 5th	Butter.....	Genuine.
97—	„ 7th	Milk	Genuine.
98—	„ 9th	Bread	Genuine.
99—	„ 9th	Lard	Genuine.
100—	„ 9th	Bread	Genuine.
101—	„ 9th	Lard	Genuine.
102—	„ 9th	Lard	Genuine.
103—	„ 9th	Bread	Genuine.
104—	„ 9th	Bread	Genuine.
105—	„ 9th	Lard	Genuine.
106—	„ 9th	Bread	Genuine.
107—	„ 9th	Lard	Genuine.
108—	„ 9th	Bread	Genuine.
109—	„ 9th	Lard	Genuine.
110—	„ 10th	Milk	Genuine.
111—	„ 10th	Milk	Adulterated with 8% of water. Cautioned by Health Sub-Committee.
112—	„ 10th	Milk	Genuine.
113—	„ 10th	Milk	Genuine.
114—	„ 10th	Milk	Genuine (nearly).

NO.	DATE.	ARTICLE.	REMARKS.
115—	Feb. 10th	Milk	Adulterated with 11% of water and deprived of 30% of its cream. Paid costs.
116—	„ 12th	Milk	Adulterated with 8% of water. Cautioned by Health Sub-Committee.
117—	„ 12th	Milk	Adulterated with 6% of water and deprived of 12% of its cream. Cautioned by Health Sub-Committee.
118—	„ 12th	Milk	Genuine.
119—	„ 12th	Milk	Genuine.
120—	„ 12th	Milk	Adulterated with 25% of water. Fined 10s. and costs.
121—	„ 12th	Milk	Genuine.
122—	„ 12th	Bread	Genuine.
123—	„ 12th	Bread	Genuine.
124—	„ 12th	Bread	Genuine.
125—	„ 12th	Bread	Genuine.
126—	„ 12th	Bread	Genuine.
127—	„ 12th	Bread	Genuine.
128—	„ 14th	Ale	Genuine.
129—	„ 14th	Ale	Genuine.
130—	„ 14th	Ale	Genuine.
131—	„ 14th	Ale	Genuine.
132—	„ 14th	Ale	Genuine.
133—	„ 14th	Ale	Genuine.
134—	„ 14th	Milk	Genuine.
135—	„ 14th	Milk	Genuine.
136—	„ 17th	Milk	Deprived of 30 % of its cream. Fined 10s. and costs.
137—	„ 17th	Milk	Adulterated with 16 % of water. Fined 10s. and costs.
138—	„ 17th	Milk	Adulterated with 12% of water and deprived of 14 % of its cream. Vendor absconded.
139—	„ 17th	Milk	Deprived of 35 % of its cream. Fined 10s. and costs.
140—	„ 17th	Milk	Genuine.
141—	„ 17th	Milk	Genuine.
142—	„ 17th	Milk	Genuine.
143—	„ 17th	Skimmed Milk ...	Adulterated with 6% of water. Cautioned by Health Sub-Committee.
144—	„ 17th	Skimmed Milk ...	Adulterated with 44% of water. Fined 40s. and costs.
145—	„ 17th	Milk	Genuine.
146—	„ 17th	Milk	Genuine (nearly).
147—	„ 17th	Milk	Genuine.
148—	„ 24th	Flour	Genuine.
149—	„ 24th	Oatmeal	Genuine.
150—	„ 24th	Flour	Genuine.
151—	„ 24th	Oatmeal	Genuine.
152—	„ 24th	Flour	Genuine.
153—	„ 24th	Oatmeal	Genuine.
154—	„ 24th	Flour	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
155—	Feb. 24th	Oatmeal	Genuine.
156—	„ 24th	Flour	Genuine.
157—	„ 24th	Oatmeal	Genuine.
158—	„ 24th	Flour	Genuine.
159—	„ 24th	Oatmeal	Genuine.
160—	„ 24th	Vinegar	Genuine.
161—	„ 24th	Vinegar	Genuine.
162—	„ 24th	Vinegar	Genuine.
163—	„ 24th	Vinegar	Genuine.
164—	„ 24th	Vinegar	Genuine.
165—	„ 24th	Vinegar	Genuine.
166—	„ 24th	Bread	Genuine.
167—	„ 25th	Milk	Adulterated with 16 % of water. Fined £5 and costs.
168—	Mar. 3rd	Milk	Genuine.
169—	„ 3rd	Milk	Genuine.
170—	„ 3rd	Bread	Genuine.
171—	„ 6th	Milk	Genuine.
172—	„ 6th	Milk	Genuine.
173—	„ 6th	Milk	Genuine.
174—	„ 6th	Milk	Genuine.
175—	„ 6th	Milk	Genuine (nearly).
176—	„ 6th	Milk	Genuine.
177—	„ 6th	Milk	Deprived of 28 % of its cream. Cautioned by Health Sub-Committee.
178—	„ 6th	Milk	Deprived of 23 % of its cream. Cautioned by Health Sub-Committee.
179—	„ 6th	Milk	Deprived of 23 % of its cream. Cautioned by Health Sub-Committee.
180—	„ 6th	Milk	Deprived of 21 % of its cream. Cautioned by Health Sub-Committee.
181—	„ 6th	Milk	Deprived of 20 % of its cream. Cautioned by Health Sub-Committee.
182—	„ 6th	Milk	Deprived of 20 % of its cream. Cautioned by Health Sub-Committee.
183—	„ 9th	Bread	Genuine.
184—	„ 9th	Bread	Genuine.
185—	„ 9th	Bread	Genuine.
186—	„ 9th	Bread	Genuine.
187—	„ 9th	Bread	Genuine.
188—	„ 9th	Bread	Genuine.
189—	„ 10th	Milk	Deprived of 15 % of its cream.
190—	„ 14th	Sweet Spirit of Nitre	Contained far too small a proportion of Nitrous Ether
191—	„ 14th	Sweet Spirit of Nitre.	Contained far too small a proportion of Nitrous Ether.
192—	„ 14th	Sweet Spirit of Nitre	Contained far too small a proportion of Nitrous Ether.
193—	„ 14th	Sweet Spirit of Nitre	Contained far too small a proportion of Nitrous Ether.

NO.	DATE.	ARTICLE.	REMARKS.
194—	Mar. 14th	Sweet Spirit of Nitre	Contained far too small a proportion of Nitrous Ether.
195—	„ 14th	Sweet Spirit of Nitre	Contained far too small a proportion of Nitrous Ether.
196—	„ 23rd	Bread	Genuine.
197—	„ 23rd	Bread	Genuine.
198—	„ 23rd	Bread	Genuine.
199—	„ 23rd	Bread	Genuine.
200—	„ 23rd	Bread	Genuine.
201—	„ 23rd	Bread	Genuine.
202—	„ 25th	Milk	Deprived of 25% of its cream. Fined 10s. and costs.
203—	„ 25th	Milk	Genuine.
204—	„ 25th	Milk	Adulterated with 8% of water and deprived of 50% of its cream. Fined 10s. and costs.
205—	„ 25th	Milk	Genuine (nearly).
206—	„ 25th	Milk	Genuine.
207—	„ 25th	Milk	Genuine.
208—	„ 25th	Milk	Genuine.
209—	„ 25th	Milk	Genuine.
210—	„ 31st	Milk	Genuine.
211—	„ 31st	Milk	Genuine.
212—	„ 31st	Milk	Genuine.
213—	„ 31st	Butter.....	Genuine.
214—	„ 31st	Milk	Adulterated with 4 % of water and deprived of 25 % of its cream.
215—	„ 31st	Skimmed Milk ...	Adulterated with 17 % of water.
216—	„ 31st	Milk	Deprived of 20 % of its cream.
217—	„ 31st	Milk	Deprived of nearly 19 % of its cream.
218—	„ 31st	Milk	Genuine.
219—	April 8th	Oatmeal	Genuine.
220—	„ 8th	Oatmeal	Genuine.
221—	„ 8th	Oatmeal	Genuine.
222—	„ 8th	Oatmeal	Genuine.
223—	„ 8th	Oatmeal	Genuine.
224—	„ 8th	Oatmeal	Genuine.
225—	„ 8th	Milk	Adulterated with 14 % of water. Cautioned by Health Sub-Committee.
226—	„ 8th	Milk	Genuine.
227—	„ 8th	Milk	Deprived of 15 % of its cream. Cautioned by Health Sub-Committee.
228—	„ 8th	Milk	Genuine.
229—	„ 8th	Milk	Deprived of 12 % of its cream. Cautioned by Health Sub-Committee.
230—	„ 8th	Milk	Genuine.
231—	„ 9th	Bread	Genuine.
232—	„ 9th	Bread	Genuine.
233—	„ 9th	Bread	Genuine.
234—	„ 9th	Bread	Genuine.

NO	DATE.	ARTICLE.	REMARKS.
235—	April 9th	Bread.....	Genuine.
236—	„ 9th	Bread.....	Genuine.
237—	„ 15th	Pepper	Genuine.
238—	„ 15th	Pepper	Genuine.
239—	„ 15th	Pepper	Genuine.
240—	„ 15th	Pepper	Genuine.
241—	„ 15th	Pepper	Genuine.
242—	„ 15th	Pepper	Genuine.
243—	„ 15th	Pepper	Genuine.
244—	„ 15th	Pepper	Genuine.
245—	„ 15th	Pepper	Genuine.
246—	„ 15th	Pepper	Genuine.
247—	„ 15th	Pepper	Genuine.
248—	„ 15th	Pepper	Genuine.
249—	„ 17th	Butter	Consisted entirely of butterine. Fined 1/- and costs.
250—	„ 17th	Butter	Genuine.
251—	„ 17th	Butter	Consisted entirely of foreign fat. Fined 5/- and costs.
252—	„ 17th	Butter	Genuine.
253—	„ 17th	Butter	Consisted entirely of foreign fat. Cautioned by Chairman of Health Committee.
254—	„ 17th	Butter	Consisted entirely of foreign fat. Fined 5/- and costs.
255—	„ 17th	Butter	Consisted entirely of foreign fat. Cautioned by Chairman of Health Committee.
256—	„ 20th	Ale	Genuine.
257—	„ 20th	Ale	Genuine.
258—	„ 20th	Ale	Genuine.
259—	„ 20th	Ale	Genuine.
260—	„ 20th	Ale	Genuine.
261—	„ 20th	Ale	Genuine.
262—	„ 22nd	Milk	Deprived of 12 % of its cream. Cautioned by Health Sub-Committee.
263—	„ 22nd	Milk	Deprived of 13 % of its cream. Cautioned by Health Sub-Committee.
264—	„ 22nd	Milk	Genuine.
265—	„ 22nd	Milk	Genuine.
266—	„ 22nd	Milk	Genuine.
267—	„ 22nd	Milk	Adulterated with 5 % of water, and deprived of 8 % of its cream. Cautioned by Health Sub-Committee.
268—	„ 27th	Vinegar	Genuine.
269—	„ 27th	Vinegar	Genuine.
270—	„ 27th	Vinegar	Genuine.
271—	„ 27th	Vinegar	Genuine.
272—	„ 27th	Vinegar	Genuine.
273—	„ 27th	Vinegar	Genuine.
274—	„ 28th	Milk	Genuine.
275—	„ 28th	Milk	Adulterated with 20 % of water.
276—	„ 28th	Milk	Adulterated with 24 % of water. Fined £10 and costs.

NO.	DATE.	ARTICLE.	REMARKS.
277—	April 28th	Milk	Genuine.
278—	„ 28th	Milk	Genuine.
279—	„ 28th	Milk	Genuine.
280—	„ 28th	Milk	Genuine.
281—	May 1st	Milk	Deprived of 14 % of its cream. Cautioned by Health Sub-Committee.
282—	„ 1st	Milk	Deprived of 11 % of its cream. Cautioned by Health Sub-Committee.
283—	„ 1st	Milk	Genuine.
284—	„ 1st	Milk	Genuine (nearly).
285—	„ 1st	Milk	Genuine.
286—	„ 1st	Milk	Genuine.
287—	„ 1st	Spirit of Nitrous Ether	56 % below “Standard” strength. Cautioned by Health Sub-Committee.
288—	„ 4th	Spirit of Nitrous Ether	62 % below “Standard” strength. Cautioned by Health Sub-Committee.
289—	„ 4th	Spirit of Nitrous Ether	87 % below “Standard” strength. Cautioned by Health Sub-Committee.
290—	„ 4th	Spirit of Nitrous Ether	75 % below “Standard” strength. Cautioned by Health Sub-Committee.
291—	„ 4th	Spirit of Nitrous Ether	56 % above “Standard” strength.
292—	„ 11th	Vinegar	Genuine.
293—	„ 11th	Vinegar	Genuine.
294—	„ 11th	Vinegar	Genuine.
295—	„ 11th	Vinegar	Genuine.
296—	„ 11th	Vinegar	Genuine.
297—	„ 11th	Vinegar	Genuine.
298—	„ 11th	Ale	Genuine.
299—	„ 11th	Ale	Contained 148 grains of salt per gallon.
300—	„ 11th	Ale	Genuine.
301—	„ 11th	Ale	Genuine.
302—	„ 11th	Ale	Genuine.
303—	„ 11th	Ale	Genuine.
304—	„ 13th	Milk	Genuine.
305—	„ 13th	Milk	Genuine.
306—	„ 13th	Milk	Genuine.
307—	„ 13th	Milk	Genuine.
308—	„ 13th	Milk	Genuine.
309—	„ 13th	Milk	Genuine.
310—	„ 18th	Bread	Genuine.
311—	„ 18th	Bread	Genuine.
312—	„ 18th	Bread	Genuine.
313—	„ 18th	Bread	Genuine.
314—	„ 18th	Bread	Genuine.
315—	„ 18th	Bread	Genuine.

NO.	DATE.	ARTICLE.	REMARKS
316—	May 18th	Oatmeal.....	Genuine.
317—	„ 18th	Pepper	Genuine.
318—	„ 18th	Oatmeal.....	Genuine.
319—	„ 18th	Pepper	Genuine.
320—	„ 18th	Flour	Genuine.
321—	„ 18th	Pepper	Genuine.
322—	„ 18th	Oatmeal.....	Genuine.
323—	„ 18th	Pepper	Genuine.
324—	„ 18th	Oatmeal.....	Genuine.
325—	„ 18th	Flour	Genuine.
326—	„ 18th	Flour	Genuine.
327—	„ 18th	Flour	Genuine.
328—	„ 18th	Pepper	Genuine.
329—	„ 18th	Oatmeal.....	Genuine.
330—	„ 18th	Flour	Genuine.
331—	„ 18th	Flour	Genuine.
332—	„ 18th	Oatmeal.....	Genuine.
333—	„ 18th	Pepper	Genuine.
334—	„ 19th	Milk	Genuine.
335—	„ 19th	Milk	Genuine.
336—	„ 19th	Milk	Genuine.
337—	„ 19th	Milk	Genuine.
338—	„ 19th	Milk	Genuine.
339—	„ 19th	Milk	Genuine.
340—	„ 21st	Ale.....	Genuine.
341—	„ 28th	Bread.....	Genuine.
342—	„ 28th	Bread.....	Genuine.
343—	„ 28th	Bread.....	Genuine.
344—	„ 28th	Bread.....	Genuine.
345—	„ 28th	Bread.....	Genuine.
346—	„ 28th	Bread.....	Genuine.
347—	„ 28th	Bread	Genuine.
348—	„ 28th	Bread	Genuine.
349—	„ 28th	Bread	Genuine.
350—	„ 28th	Bread	Genuine.
351—	„ 28th	Bread	Genuine.
352—	„ 28th	Bread	Genuine.
353—	June 1st	Pepper ..	Genuine.
354—	„ 1st	Pepper	Genuine.
355—	„ 1st	Mustard	Genuine.
356—	„ 1st	Pepper	Genuine.
357—	„ 1st	Mustard.....	Genuine.
358—	„ 1st	Pepper	Genuine.
359—	„ 1st	Mustard	Genuine.
360—	„ 1st	Mustard	Genuine.
361—	„ 1st	Pepper	Genuine.
362—	„ 1st	Mustard.....	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
363—	June 1st	Mustard	Genuine.
364—	„ 1st	Pepper	Genuine.
365—	„ 1st	Pepper	Genuine.
366—	„ 1st	Pepper	Genuine.
367—	„ 1st	Pepper	Genuine.
368—	„ 1st	Pepper	Genuine.
369—	„ 1st	Pepper	Genuine.
370—	„ 1st	Pepper	Genuine.
371—	„ 4th	Oatmeal	Genuine.
372—	„ 4th	Oatmeal.....	Genuine.
373—	„ 4th	Oatmeal.....	Genuine.
374—	„ 4th	Oatmeal.....	Genuine.
375—	„ 4th	Oatmeal.....	Genuine.
376—	„ 4th	Oatmeal.....	Genuine.
377—	„ 8th	Cream of Tartar..	Contained a little Chloride of Calcium.
378—	„ 8th	Tartaric Acid ...	Genuine.
379—	„ 8th	Cream of Tartar.	Genuine.
380—	„ 8th	Tartaric Acid ...	Genuine.
381—	„ 8th	Cream of Tartar..	Genuine.
382—	„ 8th	Tartaric Acid ...	Genuine.
383—	„ 8th	Tartaric Acid ...	Genuine.
384—	„ 8th	Cream of Tartar..	Genuine.
385—	„ 8th	Cream of Tartar..	Genuine.
386—	„ 8th	Tartaric Acid ...	Genuine.
387—	„ 8th	Tartaric Acid ...	Genuine.
388—	„ 8th	Cream of Tartar..	Genuine.
389—	„ 8th	Skimmed Milk ...	Genuine.
390—	„ 8th	Skimmed Milk ...	Genuine.
391—	„ 8th	Milk	Adulterated with 5 % of water.
392—	„ 8th	Milk	Genuine.
393—	„ 8th	Skimmed Milk ...	Adulterated with 23 % of water. Fined 5/- and costs.
394—	„ 8th	Milk	Genuine.
395—	„ 10th	Milk	Genuine.
396—	„ 12th	Milk ..	Genuine.
397—	„ 12th	Milk	Genuine.
398—	„ 16th	Bread.....	Genuine.
399—	„ 16th	Bread.....	Genuine.
400—	„ 16th	Bread.....	Genuine.
401—	„ 16th	Bread.....	Genuine.
402—	„ 16th	Bread.....	Genuine.
403—	„ 16th	Bread.....	Genuine.
404—	„ 16th	Oatmeal	Genuine.
405—	„ 16th	Oatmeal	Genuine.
406—	„ 16th	Oatmeal	Genuine.
407—	„ 16th	Oatmeal	Genuine.
408—	„ 16th	Oatmeal	Genuine.
409—	„ 16th	Oatmeal.....	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
410—	June 16th	Milk	Deprived of 25 % of its cream. Fined 10/- and costs.
411—	„ 16th	Milk	Adulterated with 3½ % of water, and deprived of 15 % of its cream. Cautioned by Health Sub-Committee.
412—	„ 16th	Milk	Genuine (nearly).
413—	„ 16th	Milk	Genuine (nearly).
414—	„ 16th	Milk	Genuine (nearly).
415—	„ 16th	Milk	Genuine.
416—	„ 18th	Milk	Adulterated with 9 % of water and deprived of 8 % of its cream. Cautioned by Health Sub-Committee.
417—	„ 18th	Milk	Genuine.
418—	„ 18th	Milk	Genuine.
419—	„ 18th	Milk	Genuine.
420—	„ 18th	Milk	Genuine.
421—	„ 18th	Milk	Deprived of 25 % of its cream. Fined 20/- and costs
422—	„ 23rd	Vinegar	Genuine.
423—	„ 23rd	Vinegar	Genuine.
424—	„ 23rd	Vinegar	Genuine.
425—	„ 23rd	Vinegar	Genuine.
426—	„ 23rd	Vinegar	Genuine.
427—	„ 23rd	Vinegar	Genuine.
428—	„ 23rd	Milk	Genuine.
429—	„ 23rd	Milk	Genuine.
430—	„ 23rd	Milk	Genuine.
431—	„ 23rd	Milk	Genuine.
432—	„ 23rd	Milk	Genuine (nearly).
433—	„ 23rd	Milk	Genuine.
434—	„ 26th	Pepper	Genuine.
435—	„ 26th	Pepper	Genuine.
436—	„ 26th	Pepper	Genuine.
437—	„ 26th	Pepper	Genuine.
438—	„ 26th	Pepper	Genuine.
439—	„ 26th	Pepper	Genuine.
440—	„ 29th	Flour	Genuine.
441—	„ 29th	Flour	Genuine.
442—	„ 29th	Flour	Genuine.
443—	„ 29th	Flour	Genuine.
444—	„ 29th	Flour	Genuine.
445—	„ 29th	Flour	Genuine.
446—	„ 30th	Milk	Genuine.
447—	„ 30th	Milk	Genuine (nearly).
448—	„ 30th	Milk	Genuine.
449—	„ 30th	Milk	Genuine.
450—	„ 30th	Milk	Genuine.
451—	„ 30th	Milk	Genuine.
452—	July 2nd	Milk	Genuine.
453—	„ 2nd.....	Milk	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
454—	July 2nd	Milk	Genuine.
455—	„ 2nd	Milk	Genuine.
456—	„ 2nd	Milk	Genuine.
457—	„ 2nd	Milk	Genuine.
458—	„ 4th	Butter	Genuine.
459—	„ 4th	Butter	Genuine.
460—	„ 4th	Butter	Genuine.
461—	„ 4th	Butter	Genuine.
462—	„ 4th	Butter	Genuine.
463—	„ 4th	Butter	Genuine.
464—	„ 4th	Butter	Genuine.
465—	„ 4th	Butter	Genuine.
466—	„ 4th	Butter	Genuine.
467—	„ 4th	Butter	Consisted entirely of Butterine. Fined 10/- & costs.
468—	„ 4th	Butter	Consisted entirely of Butterine. Fined 10/- & costs.
469—	„ 4th	Butter	Consisted entirely of Butterine. Dismissed.
470—	„ 4th	Butter ..	Consisted entirely of Butterine. Fined 10/- & costs.
471—	„ 6th	Vinegar	Genuine.
472—	„ 6th	Vinegar	Genuine.
473—	„ 6th	Vinegar	Genuine.
474—	„ 6th	Vinegar	Genuine.
475—	„ 6th	Vinegar	Genuine.
476—	„ 6th	Vinegar	Genuine.
477—	„ 10th	Bread	Genuine.
478—	„ 10th	Bread	Genuine.
479—	„ 10th	Bread	Genuine.
480—	„ 10th	Bread	Genuine.
481—	„ 10th	Bread	Genuine.
482—	„ 10th	Bread	Genuine.
483—	„ 13th	Ale	Genuine.
484—	„ 13th	Ale	Genuine.
485—	„ 13th	Ale	Genuine.
486—	„ 13th	Ale	Genuine.
487—	„ 13th	Ale	Genuine.
488—	„ 13th	Ale	Genuine.
489—	„ 17th	Confectionery ..	Genuine.
490—	„ 17th	Vinegar	Genuine.
491—	„ 17th	Vinegar	Genuine.
492—	„ 17th	Vinegar	Genuine.
493—	„ 17th	Vinegar ..	Genuine.
494—	„ 17th	Vinegar	Genuine.
495—	„ 17th	Vinegar	Genuine.
496—	„ 22nd	Pepper	Genuine.
497—	„ 22nd	Pepper	Genuine.
498—	„ 22nd	Pepper	Contained a little mineral impurity.
499—	„ 22nd	Pepper	Genuine.
500—	„ 22nd	Pepper	Genuine.
501—	„ 22nd	Pepper	Genuine.
502—	„ 22nd	Pepper	Genuine.
503—	„ 22nd	Pepper	Genuine (nearly).
504—	„ 22nd	Pepper	Genuine.
505—	„ 22nd	Pepper	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
506—	July 22nd	Pepper	Genuine.
507—	„ 22nd	Pepper	Genuine.
508—	„ 27th	Tartaric Acid.....	Genuine.
509—	„ 27th	Cream of Tartar	Genuine.
510—	„ 27th	Tartaric Acid.....	Genuine.
511—	„ 27th	Cream of Tartar	Genuine.
512—	„ 27th	Cream of Tartar	Genuine.
513—	„ 27th	Tartaric Acid.....	Genuine.
514—	„ 27th	Tartaric Acid.....	Genuine.
515—	„ 27th	Cream of Tartar	Genuine.
516—	„ 27th	Cream of Tartar	Genuine.
517—	„ 27th	Tartaric Acid.....	Genuine.
518—	„ 27th	Tartaric Acid.....	Genuine.
519—	„ 27th	Cream of Tartar	Genuine.
520—	„ 27th	Bread	Genuine.
521—	„ 27th	Bread	Genuine.
522—	„ 27th	Bread	Genuine.
523—	„ 27th	Bread	Genuine.
524—	„ 27th	Bread	Genuine.
525—	„ 27th	Bread	Genuine.
526—	„ 31st	Oatmeal	Genuine.
527—	„ 31st	Oatmeal	Genuine.
528—	„ 31st	Oatmeal	Genuine.
529—	„ 31st	Oatmeal	Genuine.
530—	„ 31st	Flour	Genuine.
531—	„ 31st	Flour	Genuine.
532—	„ 31st	Oatmeal	Genuine.
533—	„ 31st	Oatmeal	Genuine.
534—	„ 31st	Flour	Genuine.
535—	„ 31st	Flour	Genuine.
536—	„ 31st	Flour	Genuine.
537—	„ 31st	Flour	Genuine.
538—	Aug. 7th	Bread	Genuine.
539—	„ 7th	Bread	Genuine.
540—	„ 7th	Bread	Genuine.
541—	„ 7th	Bread	Genuine.
542—	„ 7th	Bread	Genuine.
543—	„ 7th	Bread	Genuine.
544—	„ 12th	Bread	Genuine.
545—	„ 12th	Bread	Genuine.
546—	„ 12th	Bread	Genuine.
547—	„ 12th	Bread	Genuine.
548—	„ 12th	Bread	Genuine.
549—	„ 12th	Bread	Genuine.
550—	„ 15th	Flour	Genuine.
551—	„ 15th	Flour	Genuine.
552—	„ 15th	Flour	Genuine.
553—	„ 15th	Flour	Genuine.
554—	„ 15th	Flour	Genuine.
555—	„ 15th	Flour	Genuine.
556—	„ 15th	Oatmeal	Genuine.
557—	„ 15th	Oatmeal	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
558—	Aug. 15th	Oatmeal	Genuine.
559—	" 15th	Oatmeal	Genuine.
560—	" 15th	Oatmeal	Genuine.
561—	" 15th	Oatmeal	Genuine.
562—	" 17th	Ale	Genuine.
563—	" 17th	Ale	Genuine.
564—	" 17th	Ale	Genuine.
565—	" 17th	Ale	Genuine.
566—	" 17th	Ale	Genuine.
567—	" 17th	Ale	Genuine.
568—	" 19th	Bread	Genuine.
569—	" 19th	Bread	Genuine.
570—	" 19th	Bread	Genuine.
571—	" 19th	Bread	Genuine.
572—	" 19th	Bread	Genuine.
573—	" 19th	Bread	Genuine.
574—	" 19th	Pepper	Genuine.
575—	" 19th	Pepper	Genuine.
576—	" 19th	Pepper	Genuine.
577—	" 19th	Pepper	Genuine.
578—	" 19th	Pepper	Genuine.
579—	" 19th	Pepper	Genuine.
580—	" 21st	Pepper	Genuine.
581—	" 21st	Pepper	Genuine.
582—	" 21st	Pepper	Genuine.
583—	" 21st	Pepper	Genuine.
584—	" 21st	Pepper	Genuine.
585—	" 21st	Pepper	Genuine.
586—	" 22nd	Vinegar	Genuine.
587—	" 22nd	Vinegar	Genuine.
588—	" 22nd	Vinegar	Genuine.
589—	" 22nd	Vinegar	Genuine.
590—	" 22nd	Vinegar	Genuine.
591—	" 22nd	Vinegar	Genuine.
592—	" 24th	Milk	Genuine.
593—	" 24th	Milk	Genuine.
594—	" 24th	Skimmed Milk	Adulterated with $4\frac{1}{2}$ % of water.
595—	" 24th	Milk	Deprived of 20 % of its cream.
596—	" 24th	Milk	Genuine (nearly).
597—	" 24th	Milk	Genuine.
598—	" 29th	Bread	Genuine.
599—	" 29th	Bread	Genuine.
600—	" 29th	Bread	Genuine.
601—	" 29th	Bread	Genuine.
602—	" 29th	Bread	Genuine.
603—	" 29th	Bread	Genuine.
604—	" 31st	Oatmeal	Genuine.
605—	" 31st	Flour	Genuine.
606—	" 31st	Oatmeal	Genuine.
607—	" 31st	Oatmeal	Genuine.
608—	" 31st	Oatmeal	Genuine.
609—	" 31st	Oatmeal	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
610—	Aug. 31st	Flour	Genuine.
611—	„ 31st	Oatmeal ..	Genuine.
612—	„ 31st	Flour	Genuine.
613—	„ 31st	Flour	Genuine.
614—	„ 31st	Flour	Genuine.
615—	„ 31st	Flour	Genuine.
616—	Sept. 8th	Milk	Genuine (nearly)
617—	„ 8th	Milk	Genuine.
618—	„ 8th	Milk	Genuine.
619—	„ 8th	Milk	Genuine.
620—	„ 8th	Milk	Genuine.
621—	„ 8th	Milk	Genuine.
622—	„ 10th	Skimmed Milk ..	Genuine.
623—	„ 10th	Milk	Adulterated with 19 % of water.
624—	„ 10th	Milk	Adulterated with 19 % of water.
625—	„ 10th	Milk ..	Genuine.
626—	„ 10th	Butter.....	Consisted entirely of Butterine.
627—	„ 10th	Milk	Genuine.
628—	„ 10th	Milk	Genuine.
629—	„ 11th	Butter.....	Genuine.
630—	„ 11th	Butter.....	Genuine.
631—	„ 11th	Milk	Genuine.
632—	„ 11th	Milk	Genuine.
633—	„ 15th	Milk	Genuine.
634—	„ 15th	Milk	Genuine.
635—	„ 15th	Milk	Genuine.
636—	„ 15th	Milk	Genuine.
637—	„ 15th	Milk	Genuine.
638—	„ 15th	Milk	Genuine.
639—	„ 16th	Butter.....	Consisted entirely of Butterine. Cautioned by Health Sub-Committee.
640—	„ 16th	Lard	Genuine.
641—	„ 16th	Coffee	Genuine.
642—	„ 16th	Pepper	Genuine.
642A	„ 16th	Butter.....	Genuine.
643—	„ 16th	Lard	Genuine.
644—	„ 16th	Pepper	Genuine.
645—	„ 16th	Mustard	Genuine.
646—	„ 16th	Butter.....	Genuine.
647—	„ 16th	Lard	Genuine.
648—	„ 16th	Butter.....	Genuine.
649—	„ 16th	Lard	Genuine.
650—	„ 16th	Butter.....	Consisted entirely of Butterine. Cautioned by Health Sub-Committee.
651—	„ 16th	Lard	Genuine.
652—	„ 16th	Pepper	Genuine.
653—	„ 16th	Mustard	Genuine.
654—	„ 16th	Butter.....	Genuine.
655—	„ 16th	Lard	Genuine.
656—	„ 16th	Mustard	Genuine.
657—	„ 16th	Pepper	Genuine.
658—	„ 16th	Butter.....	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
659—	Sept. 16th	Pepper	Genuine.
660—	„ 16th	Coffee	Adulterated with 45 % of chicory. Cautioned by Health Sub-Committee.
661—	„ 16th	Coffee	Adulterated with 50 % of chicory. Cautioned by Health Sub-Committee.
662—	„ 16th	Pepper	Genuine.
663—	„ 16th	Mustard	Genuine.
664—	„ 17th	Milk	Genuine.
665—	„ 17th	Milk	Adulterated with 4 % of water and deprived of 18 % of its cream. Cautioned by Health Sub-Committee.
666—	„ 17th	Milk	Genuine.
667—	„ 17th	Skimmed Milk ..	Adulterated with 7 % of water. Cautioned by Health Sub-Committee.
668—	„ 17th	Milk	Genuine.
669—	„ 17th	Milk	Genuine.
670—	„ 18th	Milk	Genuine.
671—	„ 18th	Milk	Genuine.
672—	„ 18th	Milk	Genuine.
673—	„ 18th	Milk	Genuine.
674—	„ 18th	Milk	Genuine.
675—	„ 18th	Milk	Genuine.
676—	„ 30th	Flour	Genuine.
677—	„ 30th	Oatmeal	Genuine.
678—	„ 30th	Oatmeal	Genuine.
679—	„ 30th	Flour	Genuine.
680—	„ 30th	Flour	Genuine.
681—	„ 30th	Oatmeal	Genuine.
682—	„ 30th	Oatmeal	Genuine.
683—	„ 30th	Flour	Genuine.
684—	„ 30th	Oatmeal	Genuine.
685—	„ 30th	Flour	Genuine.
686—	„ 30th	Oatmeal	Genuine.
687—	„ 30th	Flour	Genuine.
688—	„ 30th	Bread	Genuine.
689—	„ 30th	Bread	Genuine.
690—	„ 30th	Bread	Genuine.
691—	„ 30th	Bread	Genuine.
692—	„ 30th	Bread	Genuine.
693—	„ 30th	Bread	Genuine.
694—	„ 30th	Milk	Genuine.
695—	„ 30th	Milk	Genuine.
696—	„ 30th	Milk	Genuine.
697—	„ 30th	Milk	Genuine.
698—	„ 30th	Milk ..	Genuine.
699—	„ 30th	Skimmed Milk ..	Genuine.
700—	Oct. 5th	Pepper	Genuine.
701—	„ 5th	Pepper	Genuine.
702—	„ 5th	Vinegar	Genuine.
703—	„ 5th	Pepper	Genuine.
704—	„ 5th	Pepper	Genuine.
705—	„ 5th	Vinegar	Genuine.
706—	„ 5th	Pepper	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
707—	Oct. 5th	Pepper	Genuine.
708—	" 5th	Vinegar	Genuine.
709—	" 5th	Vinegar	Genuine.
710—	" 5th	Vinegar	Genuine.
711—	" 5th	Vinegar	Genuine.
712—	" 6th	Milk	Genuine.
713—	" 6th	Milk	Genuine.
714—	" 6th	Milk	Genuine.
715—	" 6th	Milk	Adulterated with 15 % of water. Fined 5/- and costs.
716—	" 6th	Milk	Genuine.
717—	" 6th	Milk	Genuine.
718—	" 9th	Milk	Genuine.
719—	" 9th	Butter	Genuine.
720—	" 9th	Butter	Genuine.
721—	" 9th	Butter	Consisted entirely of Butterine. Cautioned by Health Sub-Committee.
722—	" 9th	Milk	Genuine.
723—	" 9th	Butter	Consisted entirely of Butterine. Fined 40/- and costs.
724—	" 9th	Butter ..	Genuine.
725—	" 9th	Milk	Genuine.
726—	" 9th	Milk	Adulterated with 17 % of water. Cautioned by Health Sub-Committee.
727—	" 9th	Milk ..	Genuine.
728—	" 9th	Butter	Adulterated with 56 % of foreign fat.
729—	" 9th	Milk	Genuine.
730—	" 14th	Ale	Genuine.
731—	" 14th	Ale	Genuine.
732—	" 14th	Ale	Genuine.
733—	" 14th	Ale	Genuine.
734—	" 14th	Ale	Genuine.
735—	" 14th	Ale	Genuine.
736—	" 15th	Milk	Genuine.
737—	" 15th	Milk	Genuine.
738—	" 15th	Milk	Genuine.
739—	" 15th	Milk	Genuine (nearly).
740—	" 15th	Milk	Genuine.
741—	" 15th	Milk	Genuine.
742—	" 19th	Bread ..	Genuine.
743—	" 19th	Bread	Genuine.
744—	" 19th	Bread	Genuine.
745—	" 19th	Bread	Genuine.
746—	" 19th	Bread	Genuine.
747—	" 19th	Bread	Genuine.
748—	" 20th	Milk	Genuine.
749—	" 20th	Milk	Genuine.
750—	" 20th	Milk	Genuine.
751—	" 20th	Milk	Genuine.
752—	" 20th	Milk	Genuine.
753—	" 20th	Milk	Genuine.
754—	" 26th	Pepper	Genuine.
755—	" 26th	Mustard	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
756—	Oct. 26th	Pepper	Genuine.
757—	" 26th	Mustard.....	Genuine.
758—	" 26th	Pepper	Genuine.
759—	" 26th	Mustard.....	Genuine.
760—	" 26th	Pepper	Genuine.
761—	" 26th	Mustard.....	Genuine.
762—	" 26th	Mustard.....	Genuine.
763—	" 26th	Pepper	Genuine.
764—	" 26th	Pepper	Adulterated with 2 % of mineral matter.
765—	" 26th	Mustard.....	Genuine.
766—	" 26th	Pepper	Genuine.
767—	" 26th	Pepper	Adulterated with 3·7 % of sand.
768—	" 26th	Pepper	Adulterated with 5 % of mineral matter.
769—	" 26th	Pepper	Adulterated with 3 % of sand.
770—	" 26th	Pepper	Adulterated with 4·8 % of sand.
771—	" 26th	Pepper	Adulterated with 5·4 % of mineral matter.
772—	" 26th	Coffee.....	Adulterated with 47 % of chicory.
773—	" 26th	Coffee.....	Genuine.
774—	" 26th	Coffee.....	Genuine.
775—	" 26th	Coffee.....	Genuine.
776—	" 26th	Coffee.....	Adulterated with 59 % of chicory.
777—	" 26th	Coffee.....	Genuine.
778—	" 27th	Milk	Genuine.
779—	" 27th	Milk	Genuine.
780—	" 27th	Milk	Genuine.
781—	" 27th	"Skimmed" Milk	Sold as skimmed, but found to be only partially skimmed.
782—	" 27th	Milk	Adulterated with 4 % of water.
783—	" 27th	Milk	Genuine.
784—	" 28th	Butterine	Genuine.
785—	" 28th	Butterine	Genuine.
786—	" 28th	Butter	Genuine.
787—	Nov. 2nd	Coffee.....	Genuine.
788—	" 2nd	Bread.....	Genuine.
789—	" 2nd	Flour	Genuine.
790—	" 2nd	Bread.....	Genuine.
791—	" 2nd	Bread.....	Genuine.
792—	" 2nd	Oatmeal.....	Genuine.
793—	" 2nd	Bread.....	Genuine.
794—	" 2nd	Bread.....	Genuine.
795—	" 2nd	Bread.....	Genuine.
796—	" 2nd	Flour	Genuine.
797—	" 2nd	Flour	Genuine.
798—	" 2nd	Oatmeal.....	Genuine.
799—	" 2nd	Flour	Genuine.
800—	" 2nd	Oatmeal.....	Genuine.
801—	" 2nd	Flour	Genuine.
802—	" 2nd	Oatmeal.....	Genuine.
803—	" 2nd	Flour	Genuine.
804—	" 2nd	Oatmeal.....	Genuine.
805—	" 2nd	Oatmeal.....	Genuine.
806—	" 2nd	Milk	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
807—	Nov. 2nd	Milk	Genuine.
808—	„ 2nd	Milk	Adulterated with 15 % of water. Fined 10/- and costs.
809—	„ 2nd	Milk	Genuine.
810—	„ 2nd	Milk	Genuine.
811—	„ 2nd	Milk	Genuine.
812—	„ 2nd ...	Butter	Consisted entirely of Butterine. Fined 10/- and costs.
813—	„ 2nd	Butter	Genuine.
814—	„ 2nd	Butter	Consisted entirely of Butterine. Fined 10/- and costs.
815—	„ 3rd	Spirit of Nitrous Ether	94 % below standard strength.
816—	„ 3rd	Spirit of Nitrous Ether	34 % below standard strength.
817—	„ 3rd	Spirit of Nitrous Ether	22 % below standard strength.
818—	„ 3rd	Vinegar	Genuine.
819—	„ 3rd	Ale	Genuine.
820—	„ 3rd	Vinegar	Genuine.
821—	„ 3rd	Ale	Genuine.
822—	„ 3rd	Vinegar	Genuine.
823—	„ 3rd	Ale	Genuine.
824—	„ 7th	Whiskey.....	Genuine.
825—	„ 7th	Gin	Genuine.
826—	„ 7th	Brandy	Genuine.
827—	„ 9th	Pepper	Adulterated with 2·8 % of mineral matter.
828—	„ 9th	Arrowroot	Genuine.
829—	„ 9th	Arrowroot	Genuine.
830—	„ 9th	Arrowroot	Genuine.
831—	„ 9th	Pepper	Adulterated with 4¼ % of mineral matter.
832—	„ 9th	Pepper	Genuine.
833—	„ 9th	Pepper	Adulterated with 1¼ % of mineral matter.
834—	„ 9th	Cream of Tartar..	Genuine.
835—	„ 9th	Tartaric Acid.....	Genuine.
836—	„ 9th	Pepper	Genuine.
837—	„ 9th	Pepper	Adulterated with 5 % of mineral matter.
838—	„ 9th	Cream of Tartar..	Genuine.
839—	„ 9th	Tartaric Acid ...	Genuine.
840—	„ 9th	Tartaric Acid ...	Genuine.
841—	„ 9th	Cream of Tartar..	Genuine.
842—	„ 10th	Milk	Genuine.
843—	„ 10th	Milk	Genuine.
844—	„ 10th	Milk	Genuine.
845—	„ 16th	Milk	Genuine.
846—	„ 16th	Milk ..	Genuine.
847—	„ 16th	Milk	Genuine.
848—	„ 18th	“ Skimmed ” Milk	Not skimmed, but adulterated with 15 % of water. Fined 20/- and costs.
849—	„ 18th	Milk	Genuine.
850—	„ 18th	Milk	Genuine.
851—	„ 25th	Milk ..	Genuine.
852—	„ 25th	Milk	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
853—	Nov. 25th	Milk	Genuine.
854—	" 30th	Bread	Genuine.
855—	" 30th	Bread	Genuine.
856—	" 30th	Bread	Genuine.
857—	" 30th	Bread	Genuine.
858—	" 30th	Bread	Genuine.
859—	" 30th	Bread	Genuine.
860—	" 30th	Butter	Consisted entirely of butterine. Fined 5/- and costs.
861—	" 30th	Butter	Consisted entirely of butterine. Fined 5/- and costs.
862—	" 30th	Butter	Genuine.
863—	" 30th	Butter	Genuine.
864—	" 30th	Butter	Genuine.
865—	Dec. 1st	Milk	Adulterated with 20 % of water.
866—	" 1st	Milk	Adulterated with 23 % of water. Fined 10/- and costs.
867—	" 1st	Milk	Genuine.
868—	" 2nd	Pepper	Adulterated with 4.7 % of sandy and other mineral matter. Cautioned by Health Sub-Committee.
869—	" 2nd	Pepper	Adulterated with 4.6 % of sandy and other mineral matter. Cautioned by Health Sub-Committee.
870—	" 2nd	Pepper	Adulterated with 2 % of mineral matter.
871—	" 7th	Milk	Genuine.
872—	" 7th	Milk	Genuine, but poor in quality.
873—	" 7th	Milk	Genuine.
874—	" 10th	Coffee	Adulterated with 48 % of chicory. Cautioned by Health Sub-Committee.
875—	" 10th	Butter	Consisted entirely of Butterine. Fined 10/- and costs.
876—	" 10th	Butter	Consisted entirely of Butterine.
877—	" 10th	Butter	Genuine.
878—	" 10th	Butter	Genuine.
879—	" 10th	Butter	Genuine.
880—	" 10th	Butter	Genuine.
881—	" 14th	Milk	Adulterated with 30 % of water.
882—	" 14th	Milk	Adulterated with 42 % of water. Fined 10/- and costs 32/-
883—	" 14th	Milk	Genuine.
884—	" 16th	Bread	Genuine.
885—	" 16th	Bread	Genuine.
886—	" 16th	Bread	Genuine.
887—	" 16th	Bread	Genuine.
888—	" 16th	Bread	Genuine.
889—	" 16th	Bread	Genuine.
890—	" 16th	Flour	Genuine.
891—	" 16th	Flour	Genuine.
892—	" 16th	Flour	Genuine.
893—	" 16th	Flour	Genuine.
894—	" 16th	Flour	Genuine.
895—	" 16th	Flour	Genuine.
896—	" 16th	Oatmeal	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
897—	Dec. 16th	Oatmeal.....	Genuine.
898—	„ 16th	Oatmeal.....	Genuine.
899—	„ 16th	Oatmeal.....	Genuine.
900—	„ 16th	Oatmeal.....	Genuine.
901—	„ 16th	Oatmeal.....	Genuine.
902—	„ 16th	Vinegar	Genuine.
903—	„ 16th	Vinegar	Genuine.
904—	„ 16th	Vinegar	Genuine.
905—	„ 16th	Vinegar	Genuine.
906—	„ 16th	Vinegar	Genuine.
907—	„ 16th	Vinegar	Genuine.
908—	„ 23rd	Ale	Genuine.
909—	„ 23rd	Ale	Genuine.
910—	„ 23rd	Ale	Genuine.
911—	„ 23rd	Ale	Genuine.
912—	„ 23rd	Ale	Genuine.
913—	„ 23rd	Ale	Genuine.

The articles examined were :—

	261	Samples of Milk.
	128	„ Bread.
	99	„ Pepper.
	72	„ Oatmeal.
	69	„ Vinegar.
	66	„ Flour.
	55	„ Butter.
	52	„ Ale.
	16	„ Mustard.
	15	„ Cream of Tartar.
	15	„ Tartaric Acid.
	14	„ Spirit of Nitrous Ether.
	12	„ Lard.
	11	„ Coffee.
	6	„ Arrowroot.
	6	„ Flowers of Sulphur.
	6	„ Magnesia.
	5	„ Cocoa.
	2	„ Butterine.
	1	Sample of Brandy.
	1	„ Gin.
	1	„ Whiskey.
	1	„ Sugar Confectionery.
Total	..	914 Samples.

In the statement below is set forth the total number of samples analysed, and the percentages of adulteration of the whole number, and of certain articles and groups of articles in each year since and including 1873.

PROPORTION OF ADULTERATED ARTICLES PER 100 SAMPLES
ANALYSED OF THE FOLLOWING COMMODITIES.

Years.	Number of Samples Analyzed.	Total Percentage of Adulteration	Percentage of Adulteration of undermentioned Articles.								
			Milk.	Bread and Flour.	Butter.	Groceries.	Wines.	Beer.	Spirits.	Drugs.	Other Articles
1873	87	65	75	0	0	87	—	—	—	100	100
1874	79	42	67	0	66	16	—	0	100	—	—
1875	73	38	55	0	—	36	100	—	—	25	—
1876	92	33	30	—	—	19	—	33	25	36	62
1877	176	40	58	0	—	12	—	21	36	26	31
1878	158	21	57	0	0	10	0	13	26	—	—
1879	168	25	60	0	0	5	—	16	—	—	0
1880	178	21	46	0	0	0	—	0	—	—	0
1881	197	23	54	0	36	8	—	0	50	0	0
1882	321	18	36	0	25	10	—	0	—	—	0
1883	151	38	47	0	30	42	100	17	29	100	—
1884	816	21	41	1	40	23	—	0	40	21	0
1885	914	13	24	0	40	22	—	2	0	7	0

On a perusal of the figures in the second column of the above Table, it will be noticed that the number of samples analysed during the year was higher than in any previous year.

It would appear that the great activity displayed during the past two years in procuring samples has had the desired effect, for the percentage of adulteration has fallen to a decidedly lower figure than in any other year in the Table, which goes back to 1873, when the percentage of adulterated samples was 65, while now it is 13, or only one-fifth of that amount.

Milk.

Out of 261 Milks which have been analysed 63, or 24 per cent., proved to be deficient either in total solids or fat, and in a few instances in both these constituents. It is pleasing to be able to report that in no previous year has the proportion of

genuine or nearly genuine samples been so high; in the first year after the Adulteration Act of 1872 became law, no fewer than three-fourths of the Milks submitted to me from the Borough were found to have been tampered with; now the proportion of adulterated samples is rather less than one-fourth.

I have also examined 128 samples of Bread, and 66 of Flour; in no instance, however, did I detect any adulterant. It is gratifying to find that such important and necessary articles of food are now sold in a genuine condition.

A considerable proportion of the Peppers—20 out of 99—were found to contain more mineral matter than should exist in this article, while of 11 Coffees five, or 45 per cent., were a mixture of Coffee and Chicory.

Five purchases of Cocoa were made, and in each case analysis revealed the presence of large quantities of sugar and starchy matter.

So many as 22 out of 55 Butters proved to contain very little or absolutely no butter fat; there is evidently still a considerable sale of Butterine under the name of the more expensive article.

Only one of 53 Ales turned out to be adulterated, and this one by the addition of some amount of salt.

Fourteen samples of Spirit of Nitrous Ether were examined, but none of them were found to be of the strength fixed by the British Pharmacopœia, whilst most of them were very considerably below it.

Two samples of Flowers of Sulphur contained a very large proportion of Sulphate of Lime, while one sample of Cream of Tartar contained a small quantity of Lime Salt.

The samples of Vinegar, Oatmeal, Lard, Magnesia, Arrowroot, Mustard, Tartaric Acid, Sugar Confectionery, Butterine, Brandy, Gin, and Whiskey were all nearly or quite genuine.

I remain,

Mr. Chairman and Gentlemen,

Your obedient Servant,

ALFRED HILL, M.D., F.I.C.,

Borough Analyst.

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